

**A GROUNDED THEORY APPROACH TO THE EXTENSION
AND REVISION OF SCANLAN'S SPORT COMMITMENT MODEL**

by

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of the Requirements for the Degree of
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ABSTRACT

This study used a grounded theory approach to extend and revise T.K. Scanlan's (1993) sport commitment model. An attempt was made to extend the generalizability of the model and to address perceived conceptual limitations. It is argued that these limitations arose from casting the model entirely from a social cognitive perspective. The participant sample consisted of 25 athletes actively competing at the intercollegiate, national, international, or Olympic level. They competed in the following sports: wrestling, basketball, soccer, football, track and field, and triathlon. All participants engaged in a semi-structured interview lasting between 60 and 90 minutes. Verbatim transcripts were subjected to inductive content analysis via the constant comparative method. This generated a series of eight thematic hierarchies representing the participant sample's reported sources of sport commitment. Five of these hierarchies corresponded to the original constructs of the sport commitment model. They are Enjoyment, Involvement Alternatives, Investments, Social Constraints, and Involvement Opportunities. These hierarchies also included a number of component themes that served to explicate and differentiate these constructs. The remaining three hierarchies reflected superordinate constructs proposed for addition to the model. They are Transcendence / Teleology, Transformation, and Adaptive Functioning / Coping. These constructs had a decidedly clinical / humanistic-existential flavour, and they were the inevitable consequence of conducting hermeneutic research using a conceptual repertoire extending beyond social cognition. The end result was a richer, denser, more complex theoretical model that can now be tested using positivistic, quantitative methodologies.

DEDICATION

I dedicate this dissertation to my father and brother, whose failing health will soon take them away from me. They will live on in my memories and in my heart, and I believe that I was truly blessed to have them in my life. I also dedicate this dissertation to my mother for her love, care, support, and devotion throughout this project and throughout my life.

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INTRODUCTION

Literature Review

In examining the literature on sport motivation, it becomes apparent that much of the research has focused on the understanding and prediction of achievement behaviour and athletic performance (Roberts, 2001). Of equal importance, however, is the understanding of an athlete's motivation for sport participation (Gould, 1982, 1987). This is particularly salient in high-performance amateur sport where enormous amounts of time, effort, and money are invested into activities that have few tangible rewards. It is also important to amateur sport organizations, which typically operate with limited funding and with a finite pool of participants. Under these circumstances, an understanding of the factors that underlie sport participation could be crucial to the success and development of these programs.

The following section outlines the history and major trends in sport participation research. It presents the early descriptive studies, and it traces the subsequent shift toward theory testing. Three dominant theoretical orientations are described, with a synopsis of the research they inspired. The section concludes with a description of the sport commitment model with a focus on its most salient construct, sport enjoyment.

Sport Participation Research

Descriptive Research: The Early Years

Systematic research on sport participation began in the late 1970's. Much of the work was descriptive, most of it was based on youth samples, and most of it relied on survey and questionnaire methodologies (e.g., Alderman & Wood, 1976; Gill, Gross, & Huddleston, 1983; Wankel & Kreisel, 1985). In general, these studies reported that children and adolescents participated in sport for the following reasons:

- Fun (i.e. excitement, challenge, action)
- Affiliation (i.e. making friends, being accepted, gaining approval from parents and coaches)
- Competition (i.e. winning, being successful)
- Competence (i.e. learning and improving skills; being challenged; achieving goals)
- Team Aspects (i.e. being on a team)
- Fitness

It was also reported that several of these factors were cited concurrently and that they were found to vary as a function of age, gender, experience level, and level of competition (Weiss & Petlichkoff, 1989). While most of this research was conducted in the United States, cross-cultural studies reported that participation motives also varied as a function of race, social class, and ethnicity (e.g., White & Coakley, 1986; Longhurst & Spink, 1987; Weingarten, Furst, Tenenbaum & Schaefer, 1984; as cited in Weiss & Chaumeton, 1992).

As a whole, this research served to outline the major motives for participation in youth sport. While some group variation was noted, the most robust finding was that fun was consistently rated as the main reason for participating.

The Shift Towards Theory Testing: Major Theoretical Orientations

Throughout the 1980's and 1990's, and following criticisms by Iso-Ahola (1980), Landers (1983), and Weiss and Petlichkoff (1989), descriptive research gave way to theory testing. Most of this research was involved in testing one of three general theoretical orientations. These were competence motivation theory (Harter, 1978; 1981), cognitive evaluation theory (Deci & Ryan, 1985), and achievement goal theory (Nicholls, 1984). Each of these is described below, with a brief summary of the research they inspired. For more comprehensive reviews, the reader is referred to Weiss and Ferrer-Caja (2002) and Vallerand and Losier (1999).

Competence Motivation Theory

Harter's competence motivation theory (1978) is based on the assumption that people engage in most activities for intrinsic reasons. They also participate to experience a sense of mastery that comes from learning and acquiring skills. In this regard, people are driven to demonstrate competence in specific achievement domains (e.g., academic, social, or physical), and they do so by engaging in mastery attempts. This curiosity-based, challenge-seeking 'drive' is asserted to be the primary energizer for achievement behaviour. Also central to the theory are the constructs of perceived competence, perceived performance control, and reinforcement by significant others. Enjoyment is related to the theory inasmuch as successful mastery attempts are

predicted to increase perceptions of self-efficacy - which elicits general positive affect and enhances the motivation to participate.

While competence motivation theory was primarily derived in academic settings, it was also tested (albeit sparingly) in the youth sport domain. Much of this research focused upon developmental differences as they related to self-concept, perceived competence, and the influence of parents, coaches, and peers (see Harter, 1999 for a comprehensive review). Overall, this research supported the theory when comparing sport participants with non-participants (Breheny, 2002; Roberts, Kleiber, & Duda, 1981), with dropouts (Feltz & Petlichkoff, 1983), and with sport retirees (Burton & Martens, 1986; Klint & Weiss, 1987). The study by Klint & Weiss (1987), and later by Ryckman & Hamel (1993) also served to highlight the relationship between perceptions of competence and specific participation motives. In this regard, participants attracted to sport primarily for skill development tended to score highest in perceived physical competence; and those who participated for affiliative reasons tended to score highest in perceived social competence. In addition, a number of studies demonstrated a relationship between perceived competence and player status. In these studies, perceived competence varied significantly between starters, primary substitutes, and secondary substitutes (Petlichkoff, 1993a, 1993b; Weiss & Frazer, 1995).

Overall, Competence Motivation Theory appeared to have transferred reasonably well into the youth sport context. More research is necessary, however, to evaluate its applicability to adult recreational athletes and to elite competitive athletes. As well, prospective studies are recommended to determine the effectiveness of intervention programs to enhance self-perceptions and to reduce sport attrition (e.g., Ebbeck & Gibbons, 1998).

Cognitive Evaluation Theory

Based on work by Deci and Ryan (1985), cognitive evaluation theory proposes that people are motivated by innate needs to perceive themselves as competent and self-determining. These same needs form the basis of intrinsic motivation, which is defined as a natural tendency to engage in interesting and optimally challenging activities. In contrast, extrinsic motivation is defined as the desire to perform an activity to achieve instrumental outcomes like praise, recognition, or money. According to Deci and Ryan, people generally exhibit greater levels of interest, enjoyment, effort, and persistence when motivated by intrinsic factors.

One of the main tenets of cognitive evaluation theory is that perceptions of competence and self-determination are largely affected by people's appraisals of external events. For example, events conveying an external locus of control are purported to undermine self-determination and reduce intrinsic motivation. Events that promote an internal locus of control will facilitate perceptions of self-determination; and hence, they increase intrinsic motivation. Deci and Ryan referred to this as the *controlling aspect* of external events. They went on to predict that external events can affect perceptions of competence as well. For example, events that contain positive information about an individual's performance will enhance perceived competence and increase intrinsic motivation. Events conveying negative information (e.g., punishment, criticism) will diminish perceived competence and reduce intrinsic motivation. They referred to this as the *informational aspect* of external events. Deci and Ryan also suggested that the controlling and informational aspects can also be self-generated, and they need not be restricted to appraisals of external events. Therefore, perceived

competence, self-determination, and intrinsic motivation can all be affected by intrapsychic factors like self-reward, self-criticism, and self-imposed guilt.

Cognitive evaluation theory has been tested extensively in the sport and exercise domain. Despite this, few studies focused specifically on sport participation motivation. Nevertheless, the theory's predictions were supported in studies on the controlling aspect of external rewards (Orlick & Mosher 1978; Ryan, 1980), the informational aspect of feedback from significant others (Vallerand, 1983; Whitehead & Corbin, 1991), and the provision of a stimulating, challenging, self-directed learning environment (Biddle, Curry, Goudas, Sarrazin, Famose, & Durand, 1995; Ferrer-Caja & Weiss, 2000).

At present, cognitive evaluation theory appears to hold promise for research on sport participation. Weiss and Ferrer-Caja (2002) recommended that future research focus on measurement issues, conceptual clarification, the effect of social context, and the effectiveness of intervention programs.

Achievement Goal Theory

Consistent with competence motivation theory, achievement goal theory (Nicholls, 1984) asserts that while achievement behaviours are multi-determined, they are primarily motivated by a desire to demonstrate competence. It adds, however, that people differ in the manner in which this competence is measured. According to achievement goal theory, people become oriented toward specific goal domains (i.e., motivational orientations) by which their competence is appraised. Nicholls (1984) identified three types of motivational orientations: ability, task, and social approval.

Ability-oriented individuals evaluate competence in relation to others, and social comparison is their primary source of information. On the other hand, task-oriented

individuals are mastery focused; and hence, they evaluate competence in relation to their own past performances. Individuals oriented towards social approval evaluate their competence in relation to the feedback they receive from significant others. In this regard, they seek to obtain positive social feedback regardless of their performance outcome. Nicholls (1984) added two [mediating] variables to the mix: perceived ability and task difficulty. With these constructs he generated the following predictions:

1. Individuals with predominantly task-oriented goals (regardless of perceived competence) will maintain prolonged sport involvement and demonstrate adaptive effort and persistence behaviours. This is because they are primarily motivated to develop skill and to master challenges, and they also value enjoyable features of the sport experience per se.

2. Individuals with ability-oriented goals and high perceived competence should show the same behavioural pattern as the task-oriented individuals - as long as they consistently achieve norm-referenced success. Without this, they are at-risk for dropping out of sport.

3. Individuals with ability-oriented goals with low perceived competence should select strategies to protect perceptions of self-worth - like choosing very easy or exceedingly difficult tasks. They should also demonstrate less effort and persistence compared to people with other goal orientations. And further, they are the most at-risk candidates for dropping out of sport.

Throughout the 1990s achievement goal theory generated a wealth of research. For detailed reviews the reader is referred to Duda and Whitehead (1998) and Treasure and Roberts (1995). In general, this research supported the theory's predictions across

a variety of samples. These included youth wrestlers (Burton, 1992; Burton & Martens, 1986), college intramural participants (Duda, 1988, 1989), and youth interscholastic athletes (Petlichkoff, 1993a, 1993b; White & Duda, 1994).

Overall, achievement goal theory has contributed significantly to the literature on sport participation, and it holds considerable promise for future research. In this regard, Weiss and Ferrer-Caja (2002) proposed that future research include (1) further explication of the interaction between goal orientations and perceived ability; (2) the examination of goals other than task and mastery; and (3) the effect of intervention programs on goal orientation, sport participation, and achievement behaviour.

Conclusions

Competence motivation theory, cognitive evaluation theory, and achievement goal theory made significant contributions to the understanding of sport participation motivation. Despite this, a common critique of this research was that all three theories were imported largely intact from mainstream social psychology (Landers, 1983; Martens, 1987). This led to questions about their applicability to sport, and particularly to their ability to account for aspects of participation and achievement unique to sport and exercise. This in turn led to a call for the development of theories derived in a physical activity context that focus on issues specific to sport. In response, Scanlan, Carpenter, Schmidt, & Simons (1993) introduced the Sport Commitment Model. The following section describes the model and the research it has inspired to date.

Sport Commitment

The Sport Commitment Model (Scanlan, Carpenter, Schmidt & Simons, 1993; Scanlan & Simons, 1992) was based initially on Rusbult's (1980) Investment Model, which was itself an adaptation of Thibault and Kelly's (1959) Social Exchange Theory. As such, the Sport Commitment Model is based on the assumption that people are motivated to maximize positive experiences. They accomplish this through a self-generated cost-benefit analysis, which is in turn affected by the time, effort, and [irretrievable] resources already invested into that activity.

According to Scanlan et al. (1993) sport commitment is a function of five interrelated factors. These factors reflect an athlete's attraction to an activity, as well as any constraints or barriers to discontinuing it. They defined these constructs as follows:

- *Sport Commitment* is a psychological construct representing an athlete's desire and resolve to continue their sport participation. It represents an athlete's psychological state of attachment to sport participation.
- *Sport Enjoyment* is a positive affective response to the sport experience that reflects generalized feelings such as pleasure, liking, and fun.
- *Involvement Alternatives* is the attractiveness of other endeavours that could compete with sport participation, or with participation in a chosen sport.
- *Personal Investments* are personal resources put into an activity that cannot be recovered if participation is discontinued (e.g., time, effort, money).
- *Social Constraints* are social expectations or norms that create feelings of obligation to continue participating in a given sport.
- *Involvement Opportunities* are valued opportunities that are present only through continued involvement. This construct focuses on the anticipation of events or experiences, rather than their actual occurrence.

Scanlan et al. (1993) pointed out a number of features of their model. For example, it addresses *psychological attachment* to an activity, by focusing upon the

desire and resolve to continue in it. In this regard it represents a psychological state, rather than the actual behaviour of staying or leaving. This is considered to be more inclusive than other approaches to sport participation that rely largely on estimates of an individual's actual probability of continuation or persistence (e.g., Fishbein & Ajzen, 1975; as cited in Scanlan et al, 1993).

Compared to other approaches, commitment models provide a more encompassing and sport-relevant account of sport participation and its psychological antecedents. For example, commitment models assume that participation is a function of several factors working simultaneously. This contrasts sharply with competence and achievement goal models, which assume that participation is largely driven by one master motive (i.e., the desire to demonstrate competence). As a result, the sport commitment model is able to reflect a variety of psychological states of participants who manifest equal levels of commitment. This enables researchers and practitioners to conduct multi-dimensional / 'multiaxial' assessments of commitment patterns among athletes.

Scanlan et al. (1993) also point out that their model takes into account both cognitive and affective factors. This is demonstrated by the cognitive input involved in weighing the merits and demerits of alternative activities, as well as the affective contribution of sport enjoyment. The inclusion of affect into the model addresses concerns raised by numerous commentators (e.g., Hanin, 2000; Harter, 1981; Jackson, 2000; Weiss & Chaumeton, 1992) who decried the relative neglect of emotion as a motivational factor in the sport psychology literature.

In addition, the sport commitment model accounts for participation and persistence under adverse as well as favourable conditions - even when participants

report that their enjoyment is limited or absent. In contrast, competence-based models seem to be based on the assumption that participants enjoy their activity - either that, or the models neglect the motivational role of enjoyment altogether.

Further, commitment models provide a framework that integrates extant research from the related fields of sport participation motivation, dropout, and burnout.

And finally, the general construct of commitment enjoys considerable theoretical and empirical support from outside sport psychology. For example, commitment constructs have been used to explain involvement and persistence in a variety of activities including work, platonic relationships, romantic relationships, utopian communities, and blood donating (see Scanlan et al, 1993 for a review).

Research on the Sport Commitment Model

Early attempts to test the sport commitment model examined the relationship between the hypothesized constructs and the overall outcome variable, sport commitment. For example, enjoyment and investments were found to predict commitment in Little League baseball and softball players and competitive swimmers (Scanlan, Carpenter, Simons, Keeler, & Schmidt, 1990; as cited in Schmidt & Stein, 1991), French female handball players (Guillet, Sarrazin, Carpenter, Trouilloud, & Curry, 2002), and health club members in Greece (Konstantinos, Zahariadis, Tsorbatzoudis, & Grouios, 2002). Commitment constructs were also found to predict training behaviours in elite soccer and field hockey players (Helsen, Starkes, & Hodges, 1998) and elite wrestlers, figure skaters, field hockey players, and soccer players (Starkes, 2000).

Concurrently, extensions to the sport commitment model were proposed by Schmidt and Stein (1991). Based on work by Smith (1986), they used commitment

constructs to create a cognitive-affective model of sport burnout. This led to distinctions between attraction- and entrapment-based commitment, and on the model's ability to predict sport persistence, burnout, and dropout. Support for these predictions was reported by Raedeke (1997) and Weiss and Weiss (2003).

Carpenter (1993; as cited in Scanlan, Russell, Beals, & Scanlan, 2003) also extended the model by adding a number of proposed antecedents to sport commitment. These included attraction-based constructs like negative sport affect, sport satisfaction, rewards, and costs. Other variables included the availability of alternatives, social support, and perceived ability. In a mixed-gender sample of adolescent athletes, Carpenter found that six factors predicted sport commitment. They were sport enjoyment, personal investments, recognition opportunities, attractive alternatives, parental support, and feelings of obligation to one's coach. Subsequent research subsumed these constructs into the existing model. Social support, however, was held aside for further consideration as a separate addition to the general model (Scanlan, Russell, Beals, & Scanlan, 2003).

Shortly after the model's inception, research focused on measurement issues and on the relationships among its key constructs. In this regard Scanlan, Simons, Carpenter, Schmidt, & Keeler (1993) constructed a 28-item survey designed to measure all 6 constructs of the sport commitment model. To validate the measure, the Sport Commitment Survey was administered to a large sample of youth sport participants of both genders and from diverse sports and cultural backgrounds (N=1342). Factor analyses and structural equation modeling supported the use of the survey to measure sport commitment, sport enjoyment, social constraints, and involvement opportunities (Carpenter, Scanlan, Simons, & Lobel, 1993). Difficulties with the

remaining constructs (involvement alternatives and personal investments) were attributed to item characteristics and to artifacts of the sample. In examining Scanlan's conclusions, however, it appeared that these results might have also been a function of conceptual problems with the constructs themselves. This issue will be examined in a later section.

In recent years, research attempted to further explicate the sport commitment construct. For example, Carpenter and Scanlan (1998) reported on the dynamic nature of sport commitment. In a sample of soccer players, they demonstrated how sport commitment varied across a competitive season as a function of changes in enjoyment, involvement opportunities, and social constraints. Carpenter and Coleman (1998) reported similar findings in a sample of elite adolescent cricket players.

In a recent series of studies, Scanlan and colleagues attempted to revise and extend the sport commitment model using a combination of quantitative and qualitative methodologies (Scanlan, Russell, Wilson, & Scanlan, 2003; Scanlan, Russell, Beals, & Scanlan, 2003). In these studies they examined the applicability, salience, and direction of influence of commitment constructs in a sample of international-level amateur and professional athletes from New Zealand. The female participants were members of the Silver Fern netball team, while the male participants were members of the world-famous All-Black national rugby team. Based on difficulties identified in previous research (e.g., Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993), a number of constructs were recast to make them more comprehensible and sample-relevant. For example, *involvement alternatives* was recast as *other priorities* to reflect the possibility that while other activities may or may not be attractive or desirable, they may have pressing or

demanding qualities (e.g., spousal and parental responsibilities). Carpenter's social support construct was also added to the model.

In discussing their findings, Scanlan et al. (2003) reported that *sport enjoyment* and *valuable opportunities* (i.e., involvement opportunities) emerged as the most salient determinants of sport commitment. They also found that *enjoyment* permeated the discussion of several other constructs, particularly *valuable opportunities* and *personal investments*. It was also reported that recasting the *involvement alternatives* construct elicited interview responses that provided valuable insights into the relationship of this construct with commitment. And further, *personal investments* was expanded to include the notion of loss (i.e., losing resources already invested). This was described as a "major theoretical breakthrough" (p. 399) inasmuch as it reflected Rusbult's (1980) notion that the potential for losing existing investments gives rise to greater commitment and continued investment. Also, and consistent with previous research (Carpenter et al., 1993, Scanlan, Simons et al. 1993), *feeling obligated* (i.e., social constraints) was not found to be related to commitment. In fact, respondents were reportedly emphatic that their sport participation was voluntary and under their control. The *feeling encouraged and supported* construct (i.e., social support) was described as a useful addition to the sport commitment model, but further work was recommended before it could be considered for formal inclusion.

Overall, Scanlan, et al. (2003) concluded that their findings provided insights into the commitment profile of actively participating elite athletes. They also provided useful detail for item development for future questionnaires. More importantly, the researchers concluded that their findings supported, extended, and elucidated their previous research, and that these findings provided support for the external validity of the model.

Conclusions

Overall, the sport commitment model appears to hold promise as an explanatory framework for sport participation. It provides a parsimonious account of participatory behaviours like persistence, dropout, and burnout, and it incorporates a variety of cognitive, affective, and social contextual variables. Attempts to measure the constructs seem promising, and studies are beginning to accrue on the applicability and generalizability of the model.

One of the model's primary strengths is that it is sport-specific. Despite this, many of the constructs were imported directly from non-sport theories like social exchange theory (Thibaut & Kelly, 1959) and investment theory (Rusbult, 1980). While these constructs seem to have transferred reasonably well to sport, it is reasonable to question the limits of their applicability. This is particularly relevant in light of psychometric difficulties measuring constructs like personal investments and involvement alternatives, which might have been easier to measure if they had been developed with athletes in mind.

One exception to this criticism is the construct of sport enjoyment. This construct was derived entirely within a sport context, using samples of youth, adolescent, and (retired) adult sport competitors (e.g., Scanlan & Lewthwaite, 1986; Scanlan Carpenter, Lobel, & Simons, 1993; Scanlan, Stein, & Ravizza, 1989). More importantly, the researchers elucidated the construct using hermeneutic, theory-generating, qualitative methods. The result was a truly sport-specific construct, since it arose from the testimony of athletes providing unstructured, unrestricted accounts of their lived experiences in sport.

The following section outlines the development of the construct of sport enjoyment. In the following chapter, an argument is proposed that a similar process be applied to the remainder of the sport commitment model.

Sport Enjoyment

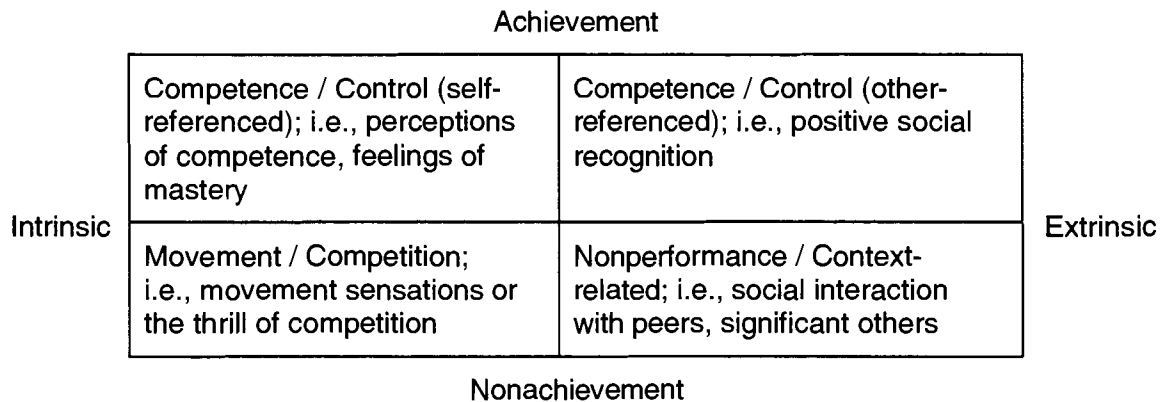
The importance of enjoyment in sport participation is intuitively obvious to sport administrators, physical educators, and sport participants. Despite this, sport enjoyment has received relatively little attention in the sport psychology literature. This is particularly true of research on sport participation. This is an interesting paradox, since the descriptive research presented above consistently identified enjoyment as the most commonly stated reason for engaging in sport. And further, a lack of enjoyment was the most frequently cited reason for dropping out.

In any case, much of the existing research on sport enjoyment is descriptive. Most of it correlated self-reported enjoyment with variables like participation and dropout (e.g., Boyd & Yin, 1996; Gill, Gross, & Huddleston, 1983; Gould, Feltz, & Weiss, 1985; Gould & Horn, 1984; Klint & Weiss, 1986). In other cases, enjoyment was subsumed or implied in other constructs like intrinsic motivation (Deci & Ryan, 1985) or flow (Csikszentmihalyi, 1975; Jackson & Csikszentmihalyi, 1999; Jackson, 2000), or cited as consequences of achievement related choices (Harter, 1981) or task-oriented goals (Nicholls, 1984, ; Boyd & Yin, 1996). And further, much of the research treated enjoyment as a byproduct (or a mediator) of sport participation, and inherently tied to perceived competence. Moreover, these studies did not examine the role of enjoyment as a primary motivating factor, despite encouragement from the mainstream literature on motivation and emotion (Izard, 1993; Weiner, 1977; as cited in Vallerant & Blanchard,

2000). As a result, reviewers in sport psychology have advocated for more research on the motivational properties of sport enjoyment (Harter, 1981; Scanlan, Stein, & Ravizza, 1989; Weiss & Chaumeton 1992).

In addressing this issue, Scanlan and Lewthwaite (1986) synthesized research on intrinsic motivation and achievement strivings to create a two-factor model of sport enjoyment. This model appears in Figure 1. The first factor is an intrinsic-extrinsic pole. It refers to sources of enjoyment that are inherent to an activity (i.e., intrinsic) or are byproducts of it (i.e., extrinsic). The second factor is an achievement-nonachievement pole, relating to sources of enjoyment that are tied to a tangible outcome (i.e., achievement) or independent of it (i.e., nonachievement).

Figure 1. The Sport Enjoyment Model



Scanlan & Lewthwaite (1986) described each quadrant of the model as follows:

- *Achievement-Intrinsic Factors* (Quadrant I): Perceptions and/or feelings of competence and control that are self-referenced (e.g. feelings of mastery in performing a skill, or in recognizing improvement)
- *Achievement-Extrinsic Factors* (Quadrant II): Perceptions and/or feelings of competence and control that are other-referenced (e.g. social recognition, defeating others).

- *Nonachievement-Intrinsic Factors* (Quadrant III): sources of enjoyment inherent in the activity itself, like movement sensations or the thrill of competition.
- *Nonachievement-Extrinsic Factors* (Quadrant IV): sources of enjoyment involving nonperformance aspects of sport, like traveling, or social relations with peers and significant others.

Research on the Sport Enjoyment Model

Scanlan & Lewthwaite (1986) studied predictors of enjoyment in wrestlers aged 9 to 14 years. Using survey measures, they found that five variables were able to predict 38% of the variance in seasonal enjoyment (defined as retrospective ratings of enjoyment spanning the most recent competitive season). In order of magnitude, these predictors were as follows:

- Adult satisfaction with performance
- Negative maternal interactions
- Age
- Perceived ability
- Positive adult involvement

The contribution of perceived ability was consistent with previous research (e.g., Harter, 1981; Deci & Ryan, 1985); however, the importance of significant adult influences underscored the need to examine enjoyment sources from a broader spectrum than purely intrinsic factors.

Following up on this theme, Scanlan, Stein, & Ravizza (1989) used qualitative methods to identify as many enjoyment sources as possible. Using a sample of retired elite figure skaters they used methods from grounded theory (i.e., inductive content analysis) to analyze verbatim transcripts of twenty-six in-depth, semi-structured interviews. The researchers chose this sample because previous research had focused

largely upon youth sport participants – and as such it had little to say about adult athletes, and much less about elite competitors. In the end, their analyses produced five thematic hierarchies. Many of these themes were consistent with constructs noted in existing research; a number of them, however, were new to the literature. The five main constructs (and the lower-order themes from which they were comprised) were as follows:

1. Social and life opportunities: This was related to the experience of forming relationships with peers and with [adult] significant others. It was also related to the privilege of having broadening experiences outside the routine of sport life. It consisted of the following themes:

- Friendship opportunities through skating
- Opportunities afforded by going to competitions and touring (traveling, experiencing new cultures, etc.)
- Positive family and coach relationships

2. Perceived competence: This was defined in a manner consistent with existing research. It also included one theme that was new to the literature. In any case, perceived competence consisted of the following themes:

- Mastery: Autonomous achievement related to both the process and the outcome of mastery
- Competitive achievement: Socially-referenced achievement (i.e., winning, being better than others, or performing better than others at practice)
- Performance achievement: Showmanship; a social achievement related to the performing aspects of sport (a construct absent from the literature in sport psychology, social psychology, and achievement motivation)
- Demonstration of athletic ability: Being better than non-skating peers at a sport; being able to do something that others could not do

3. Social recognition of competence: This was defined as receiving recognition, acclaim, or fame through public acknowledgement of one's performances and achievements. It was made up of the following themes:

- Achievement recognition
- Performance recognition: Recognition from an audience for a display of talent or showmanship – a theme new to the literature, reflecting entertainment aspects of a sport

4. The act of skating: This was defined as the movement and sensations of skating (i.e., kinaesthetic and tactile sensations, a sense of physical exhilaration). It consisted of the following themes:

- Self-expression/creativity
- Athleticism of skating: Feelings of fitness and strength, satisfaction in the process of hard physical training
- Flow / peak experiences: Experiences that felt effortless and near perfection, producing memorable experiences of a seemingly sensory nature

5. Special cases: These were themes that did not share a conceptual commonality with the other themes. They included the following:

- A sense of 'specialness': Being exceptionally talented; having abilities beyond the ordinary
- Coping through skating: Coping with life through sport, or using sport as an escape from general life problems

Overall, the researchers concluded that an athlete's sources of enjoyment are multi-faceted. Further, they suggested that youth sport participants and elite athletes derive enjoyment from similar sources, but these sources are more diverse in elite athletes. They also suggested that inductive content analyses of open-ended interviews

were useful for discovering new constructs and for providing researchers with a greater depth of understanding. They went on to assert that qualitative methods can yield a rich, ecologically valid database "that is not limited by the conceptual impositions and experiential deficits of the researchers" (Scanlan & Simons, 1992, p.215). They also suggested that exploring enjoyment sources with different samples would enhance the likelihood of discovering new sources that might otherwise be missed.

Support for the Sport Enjoyment Model was reported by, Bakker, De Koning, Van Ingen, Schenau, and De Droot (1993). In this study, thirty-two speed skaters from the Dutch national junior team (ages 18-22) were interviewed on what they enjoyed about speed skating. All questions were open-ended, and participant responses were compared to the enjoyment categories reported by Scanlan et al. (1989). Bakker et al. reported that their interview responses were reliably classified into these categories. They also reported that the most important sources of enjoyment were, respectively, the act of skating, perceived competence, social and life opportunities, and social recognition of competence. They further emphasized that their sample was not only motivated by achievement aspects of sport, but by kinaesthetic-intrinsic factors as well (e.g., the act of skating). They also noted that enjoyment arose from extrinsic as well as intrinsic sources.

In a later study, Scanlan, Carpenter, Lobel, and Simons (1993) developed a survey measure to assess sources of enjoyment based on the conceptual categories of the sport enjoyment model. The scale was a 31-item instrument designed to measure general seasonal enjoyment and predictors of sport enjoyment. Preliminary analyses with youth sport samples yielded six interpretable factors. These factors were included in multiple regression analyses and accounted for 47% of the variance in the dependent

variable (sport enjoyment). These factors were effort, mastery, positive team interactions, team support, positive coach support, and coach's satisfaction with performance. Two other factors emerged from the analyses but they were not significant predictors. They were positive parental involvement / interactions / performance satisfaction, and perceived ability. The authors suggested that rather than being empirically or conceptually flawed, the predictive ability of these two factors might have been sample dependent. Overall, the authors concluded that the scale provided a significant base for future attempts to identify and measure components of the enjoyment construct.

In an attempt to synthesize existing research, Weiss, Kimmell, and Smith (2001) proposed a model of sport participation with enjoyment as its central construct. In this model, achievement goals, social goals, and intrinsic motivation are considered to be antecedents to sport enjoyment, while sport commitment and sport participation are its consequences. In this manner, enjoyment acts as a filter through which other factors may affect sport commitment. This model is intuitively appealing inasmuch as it incorporates most of the constructs of the sport commitment model. It also describes the relationship between these constructs, and it provides some insight into their direction of influence. Given its recent inception, however, the model has yet to be tested.

Summary and Conclusions on Sport Participation Research

Theory and research on sport participation appears to have followed developmental lines common to many areas of research. For example, early studies were largely descriptive, and they served to outline the basic parameters of the

phenomenon. This was followed by a more prolific period of theory testing, with competence motivation theory, cognitive evaluation theory, and achievement goal theory as the dominant perspectives. Despite their initial success, questions emerged about the applicability of these theories to sport. These questions related not only to issues of external validity, but also to the philosophies of science upon which the theories were based (Martens, 1987; Landers, 1983).

The sport commitment model addressed some of these issues, as it was (in part) derived in a sport and exercise activity setting. Moreover, it was tested exclusively within a physical activity domain. A more noteworthy aspect of the model, however, is the historical period in which it evolved. Unlike the theories noted above, the sport commitment model was developed at a time when alternative (i.e., post-modern) models of science were gaining popularity. This arose largely out of concerns about psychology's prevailing orientation, logical positivism (Brustad, 2002). As a result, the sport commitment model emerged as a hybrid of positivistic and hermeneutical approaches to science. This distinguishes the sport commitment model from its theoretical predecessors, and it allows for a number of interesting theoretical and methodological possibilities. This is the focus of the following section.

Statement of the Problem

It is without question that logical positivism has been the dominant philosophy of science throughout the history of modern psychology (Brustad, 2002; Leahy, 1987). Despite this, criticisms of this worldview have been voiced since the early 20th century. In theoretical physics, for example, quantum mechanics and relativity theory posed serious challenges to positivism's ontological and epistemological bases (Brustad,

2002). In addition, challenges emerged from philosophers of science like Fereyabend (1988), Lakatos & Musgrave (1970) and Harre (1985). These issues have also begun to emerge in the mainstream psychology literature (e.g., Seligman & Csikszentmihalyi, 2000) despite the fact that they were also expressed by 'classic' theorists like Wundt and Allport (A. Paranjpe, personal communication, 1997). In any case, critics have generally argued that while useful for explaining some natural phenomena, logical positivism is inadequate to fully understand the complexities of human cognitive, affective, and social experience.

These concerns have also been raised in the context of sport psychology (e.g., Dewar & Horn, 1992; Landers, 1983). In a seminal article, Martens (1987) asserted that a significant proportion of the research in sport psychology (and in psychology at large) was incoherent, invalid, and outright trivial. He attributed this to modern psychology's 'dogged allegiance' to logical positivism, which he considered inappropriate as an exclusive means to understanding human experience. Martens was particularly critical of positivism's reliance on the principles of realism, reductionism, and objectivism, and the manner in which they detach the knower from the knowledge construction process. According to Martens, positivism's demand for standardization and experimental control, and particularly its narrow construal of the construct of objectivism, gave rise to a wealth of elegantly designed studies with contrived, artificial, and practically meaningless findings.

As an alternative, Martens (1987) proposed a 'heuristic paradigm' based on qualitative /constructivist / hermeneutic approaches to science. This paradigm is distinguished from positivism on ontological and epistemological grounds, and it is based on the following principles and practices:

- Idealism
- Holism
- Objectivism (defined in terms of explicability, rather than detached neutrality)
- Hermeneutics / Interpretation / Critical Analysis

Also central to the paradigm is the assertion that knowledge is contextually situated, and that it can never be fully understood without reference to a host of situational variables (e.g., history, politics, economics, ideology, and culture). And further, the heuristic paradigm asserts that the knower is central to the knowledge generating process. In this manner a researcher's unique perspective is no longer neutralized (as in positivistic research); rather, it forms an integral component of a study, since the researcher's task is to derive meaning, or "make sense" of the findings. And finally, the primary objective of the heuristic paradigm would be the development of *understanding*, in contrast to positivism's goal of prediction and control.

Based on these principles, the heuristic paradigm would make use of several methodologies considered largely 'unscientific' within the positivistic tradition. These include the following:

- Case studies
- Field studies
- Introspectionism
- Clinical experience / clinical judgment / expert opinion
- Participant observation
- Open-ended interviews
- Content analysis
- Qualitative data analysis

While these ideas may seem heretical in the academic mainstream, it should be noted that Martens was not advocating a wholesale rejection of orthodox science. Rather, he advocated a 'marriage' of orthodox science and the heuristic paradigm. In this manner, hermeneutic / exploratory work would be done in the early stages of investigation to discover the parameters of phenomena and to lay down a conceptual framework. After that, orthodox science could examine the dynamics of these frameworks by testing hypotheses and predictions.

One consequence of this marriage would be the creation of a multi-paradigmatic discipline with flexible conceptual boundaries and with a variety of methodological options. This could lead to the acceptance and systematic examination of theoretical orientations previously deemed unscientific, since they were difficult to test with positivist methodology (e.g., humanistic-existential theories). It could also lead to conceptual blending or theoretical 'cross pollination', which could bridge a number of existing theoretical divides (e.g., between personality and social psychology).

When commenting on sport psychology in particular, Martens (1987) advocated the use of the heuristic paradigm to create sport-specific models and theories. Reflecting criticism by others (e.g., Dishman, 1983; Landers, 1983) Martens complained that sport researchers have spent too much time testing theories from mainstream psychology (and mostly from social psychology). While providing a useful (initial) empirical and conceptual base, these researchers not only diverted attention away from the uniqueness of the sport context, but they also imported orthodox science's epistemological and methodological limitations. As such, Martens recommended that as a developing discipline, sport psychology can use the heuristic paradigm to avoid repeating problems of the past.

Scanlan's Research Program

By now the reader may recognize how Scanlan's research program addressed many of Martens' concerns. First, she used methods from orthodox science and from the heuristic paradigm. For example, her study with elite figure skaters was based entirely on open-ended interviews. The data were subjected to inductive content analysis, and the end result was a conceptual hierarchy of enjoyment sources (Scanlan, Stein, & Ravizza, 1989). She then used orthodox scientific methods to quantify these constructs (Carpenter, Scanlan, Lobel, & Simons, 1993).

Second, Scanlan's theoretical formulations were synthesized from a number of distinct theoretical models. For example, her enjoyment model incorporated constructs from the literature on intrinsic-extrinsic motivation (Deci & Ryan, 1985) achievement goal perspectives (Nicholls, 1984), and competence motivation theory (Harter, 1981). This model was then subsumed into a larger model of sport commitment, which was adapted from social exchange theory (Thibaut & Kelly, 1959).

Third, Scanlan's research program led to the discovery of a number of sport-specific constructs derived in a sport setting. More importantly, some of these constructs were previously unheard of in the literatures on sport psychology, social psychology, and achievement motivation. These included constructs like *performance achievement*, *performance recognition*, *coping through skating*, and *a sense of 'specialness'* (Scanlan, Stein, & Ravizza, 1989).

In all, Scanlan's program fit well within Martens' (1987) prescriptions for the future of sport psychology research. As a result, she and her colleagues have provided the sport psychology literature with research that is inclusive, comprehensive,

parsimonious, and relevant to sport. They also provided a conceptual framework that is amenable to significant revision, extension, and elaboration. As a result, the sport commitment model provides numerous opportunities for future research.

The following section contains a critical analysis of the sport commitment model. Conceptual and methodological issues are discussed, followed by the research questions that inspired the current study.

Criticisms of the Sport Commitment Model:

Conceptual Concerns

While the sport commitment and sport enjoyment models synthesize a number of theoretical approaches, they both retain a decidedly social cognitive flavour. As such, it would appear that they are still rooted in a single paradigm, contrary to Martens' (1987) call for multiparadigmatic research. While this may have been a conscious decision, it may have also resulted from what Scanlan, et al. (1989) described as the 'experiential deficits of the researcher'. While this is a typical problem in orthodox science, it is also common in qualitative / hermeneutic research as well. In this case the choice of single versus multi-paradigmatic models might have resulted from Scanlan et al.'s training and experience as experimental social psychologists. Specifically, it is suggested that this background may have influenced the hermeneutic categorization process, since the conceptual repertoire of these researchers would likely have been dominated by models from social psychology. As such, it is not surprising that the sport commitment model contains few (if any) thematic categories typically associated with clinical and / or personality psychology. Some examples may illustrate this point:

First, the sport commitment model makes no mention of the role of goals and dreams in an athlete's commitment to sport. Therefore, the model is not explicitly teleological – and therefore, it is not truly motivational (Roberts, 1992). The introduction of teleologically-based constructs (i.e., from humanistic-existential theories) would make it so.

Second, problems exist in Scanlan's operational definition of enjoyment. For example, Kimiecic & Harris (1996) raised concerns about construing enjoyment as 'a general affective response reflecting feelings such as pleasure, liking, and fun'. Instead, they propose that enjoyment is a much more complex construct with tonic and phasic properties. As such, their conception of enjoyment differentiates between momentary pleasures (as in Scanlan's concept of fun, liking, etc.) and enduring life fulfillment. These latter concepts rarely appear in the social psychology literature. They are commonly discussed, however, in humanistic-existential psychology, and in the emerging field of positive psychology (e.g., Seligman & Csikszentmihalyi, 2000; Snyder & Lopez, 2002).

Third, in the Scanlan, Stein, & Ravizza (1989) study with elite figure skaters, the researchers identified enjoyment themes they called 'special cases'. These were themes that did not fit within the existing model, and they did not correspond to any construct in the mainstream (social psychological) literature. As such, these constructs were treated as outliers. These themes were *coping with sport* and *a sense of specialness*. It should be noted, however, that both of these themes have analogues outside of social psychology. *Coping with sport* corresponds to adaptation concepts from literature on addictions and sexual offending (e.g., Finkelhor, 1984; Marlatt, 1982),

and a *sense of specialness* corresponds to concepts within the literature on identity and identity development (e.g., Paranjpe, 1998).

In sum, it would seem that the sport commitment model and the sport enjoyment model are conceptually limited. This is an inherent by-product of hermeneutic research, however, and it does not necessarily reflect any error or omission on Scanlan's part. For example, when researchers are themselves the instrument of research, and when their unique perspectives are the means for 'making sense' of the data, it is not surprising to find that different people will see different things in the same body of data. The solution to this problem is to examine phenomena from a variety of perspectives and to integrate the overall findings. The end result is a richer, deeper, and more comprehensive theoretical framework than could be derived from one perspective alone. Given this, it is suggested that the sport commitment model and the sport enjoyment model would benefit from the inclusion of constructs from theoretical domains other than social psychology.

Empirical / Methodological Concerns

Sampling Issues

To date, the majority of research on sport commitment and sport enjoyment was conducted on youth sport participants. As such, these findings may not generalize to samples of older adolescents and adults.

Another sampling concern is that of the few sport commitment studies on elite athletes, only one was based on athletes who were still competing (Scanlan, Russell, Beals, & Scanlan, 2003). In the study on elite figure skaters, for example, Scanlan, Stein, & Ravizza (1989) relied on retrospective accounts of retired national and

international competitors. This left the data vulnerable to a number of potentially biasing influences associated with retrospective accounts (e.g., selective recall, primacy / recency effects). It is also possible that upon recall, these athletes might have weighted enjoyment sources differently compared to when they were actively competing. And further, this study was based entirely on figure skaters, raising concern about the number of enjoyment sources that might have been specific to skating. Recognizing this, the researchers suggested that additional enjoyment sources could be discovered by repeating the study with other samples.

In all, it would seem that the generalizability of the sport commitment and sport enjoyment models is unknown. More research with adults (and particularly with elite athletes) is necessary.

Measurement Concerns

Few studies have attempted to quantify the constructs of the sport commitment model (Carpenter, Scanlan, et al. 1993; Scanlan, Simons et al., 1993). The results of these studies were modest, leading the researchers to conclude that existing instruments 'held promise' as potential measures of sport enjoyment and sport commitment. As such, it would appear that considerable work remains on these measures before they can reach commonly accepted psychometric standards. For the most part, the difficulties associated with these measures were attributed to sampling artifacts and to item characteristics. It seems plausible, however, that these difficulties were also related to conceptual limitations in the constructs themselves – and that further conceptual clarification could lead to the development of more empirically robust test items.

To illustrate this point it should be noted that most of the major constructs in the sport commitment model were imported directly from theories in social psychology. Sport enjoyment was the only construct derived in a sport context, and it was also the only construct derived using the qualitative, inductive, construct-generating methods of grounded theory. It is also the most empirically sound construct in the model. Given this, it is reasonable to expect that if these same methods were applied to the remaining constructs, a number of sport-relevant themes would emerge from the analysis. These themes could then be translated into test items that would likely enhance the psychometric properties of the existing measures. Scanlan, Russell, et al. (2003) started this process in their study with All Blacks Rugby players in New Zealand. They acknowledged, however, that more research (i.e., qualitative and quantitative) is required.

The Current Study

Objectives

In this study a commitment was made to adopt Martens' heuristic paradigm. Specifically, the mandate was to use a hermeneutical, qualitative approach for the following purposes:

- To revise existing constructs within the sport commitment model
- To uncover new constructs for inclusion in the sport commitment model
- To revise existing constructs within the sport enjoyment model (i.e., enjoyment sources)
- To uncover new constructs for inclusion in the sport enjoyment model
- To enrich the sport commitment and sport enjoyment models with constructs from theoretical models beyond social psychology and social cognition

An attempt was also made to enhance the generalizability of the sport commitment model. Therefore, a decision was made to focus on actively competing adult elite athletes. It was also decided to use athletes of both sexes, and to include participants from a variety of sports.

Research Questions

This study will address the following research questions:

1. Are the constructs in the sport commitment model replicable? Do the enjoyment sources reported in Scanlan, Stein, and Ravizza (1989) apply to samples other than figure skaters?
2. How does the sport commitment model change when applied to actively competing elite athletes from a variety of sports?
3. How does the model change when data are viewed from theoretical orientations beyond social psychology and social cognition?

METHOD

This chapter begins with a brief overview of qualitative research. This was deemed necessary since many readers may be unfamiliar with this approach. For more detail, a number of texts are available (e.g., Denzin & Lincoln, 2000; Lincoln & Guba, 1985; Miles & Huberman, 1984; Patton, 1980).

The latter parts of this chapter contain descriptions of the sampling, instrumentation, data collection, and data analysis procedures used in this study.

Basic Features of Qualitative Research

Qualitative research and orthodox science differ according to their ontological, epistemological, and axiological assumptions. Specifically, they differ on their basic assumptions on the nature of reality, the nature of knowledge, and the purpose of scholarly research. For example, orthodox science is inherently reductionistic. It studies phenomena in terms of its basic constituents, and often in the context of controlled laboratory conditions. Knowledge construction proceeds from the general to the particular, as typified by the hypothetico-deductive method. Foreknowledge is inherent in this approach, and researchers are generally involved in the business of construing evidence to support their preconceptions (i.e., hypotheses or pre-existing theory). As a result, orthodox science is largely confirmatory. And further, its primary mandate is prediction and control.

In contrast, qualitative research is holistic. Phenomena are examined in their entirety, in their natural settings, and in relation to a host of contextual variables. Knowledge construction is inductive, and it proceeds from the particular to the general. Theory generally emerges from the data, and not from the preconceptions of the researcher. Qualitative researchers attempt to minimize advance structure on their data, and they usually have little foreknowledge of the outcome of their studies. As such their work is exploratory, and their primary mandate is to understand the complexities of phenomena in their naturally occurring states.

It should be noted, however, that qualitative research is not a uniform entity. Rather, "qualitative research" is an omnibus term representing several distinct approaches. These include (but are not limited to) phenomenology, hermeneutics, ethnography, critical theory, and feminist theory (for a comprehensive taxonomy, the reader is referred to Denzin and Lincoln, 2000, and to Rudestam and Newton, 1992). In general, qualitative approaches are distinguishable along three basic dimensions: the problems and concerns of the researcher, the researcher's epistemic objectives, and the relationship between the researcher and the subject matter.

For example, researchers may be concerned with describing lived experience (phenomenology), interpreting meaning from text and / or testimony (hermeneutics), understanding social structures, social roles, and social interrelations (ethnography), or understanding the nature of power and social relations (critical theory and feminist theory). Their epistemic objective may be pure description (phenomenology), understanding, explanation, and meaning (hermeneutics), contextual understanding and meaning (ethnography), or emancipation (critical theory, feminist theory). And finally, researchers may relate to their subject matter as an active participant or participant-

observer (ethnography), a detached chronicler of inner experience (phenomenology), an interactive interpreter (constructive hermeneutics), or as a detached interpreter (objective hermeneutics, critical theory, feminist theory).

Despite their differences, qualitative approaches share a set of criteria by which their products are evaluated. These are described below.

Criteria for Evaluating Qualitative Research

Given their fundamental differences, it is not surprising that orthodox science and qualitative research use fundamentally different evaluative criteria. It is beyond the scope of this document to describe these criteria in detail. A number of excellent texts exist for this purpose (e.g., Lincoln & Guba, 1985; Miles & Huberman, 1984; Patton, 1980). Nevertheless, a brief overview of these criteria is included here, along with list of 'best practices' to designed to meet them (Henwood & Pidgeon, 1992).

As a general rule, orthodox science relies on correspondence with the empirical world as its ultimate arbiter of truth. In contrast, naturalistic research is evaluated on the basis of its 'trustworthiness', which is a function of its persuasiveness and its power to inspire further inquiry (Lincoln & Guba, 1985; Miles & Huberman, 1984). In terms of evaluative criteria, trustworthiness is differentiated into the interrelated concepts of auditability, credibility, and transferrability.

Auditability refers to the replicability of a study. It is roughly analagous to the orthodox concept of reliability, which is usually understood in terms of the stability and consistency of measurement instruments or procedures. In qualitative research the concept of stability is largely rejected in favour of consistency (Lincoln and Guba, 1985). In this regard consistency is a function of the explicability and replicability of a

researcher's data gathering, coding, and analytic methods. Given this, a study is considered to be auditable if naïve researchers can replicate a study under roughly similar circumstances as the original. This replicability, however, does not necessarily apply to a study's findings. This is particularly the case with hermeneutic research, where the interpretation of data is largely dependent on the unique perspective of the researcher. In this regard, replicability would apply only to the data gathering and coding process. This is usually achieved by providing explicit instructions on the coding process, while at the same time providing detailed definitions of the categories that emerged from the data. In this way other researchers could examine the raw data, itemize it, categorize it, and arrive at roughly similar conclusions as the primary researcher.

Credibility is concerned with the believability or persuasiveness of a study. It is roughly analogous to the concept of internal validity. It consists of two related concepts: structural corroboration and confirmability.

Based on the ontological assumption of multiple constructed realities (see Lincoln & Guba, 1985), structural corroboration consists of producing a knowledge structure roughly isomorphic with the lived experience of the research participants. This is accomplished through prolonged engagement (i.e., by spending sufficient time with participants to assess for distortions, impression management, or misunderstandings), persistent observation (i.e., exploring a participant's experience in great detail), member checks (i.e., presenting results to research participants to assess the 'fit' to their lived experiences), and by triangulation (i.e., obtaining data from a variety of sources or methods).

Confirmability refers to the 'qualitative objectivity' of a naturalistic report. In this regard researchers must demonstrate that their findings were factually based, that the data were systematically collected, sorted, and categorized, and that the categorization processes were theoretically informed and explicable. Confirmability also concerns itself with the explicability of decisions affecting the course of the research, the researcher's own experience of the study, the researcher's life experiences, biases, and insights, or anything else that could shape the course and outcome of the study.

Confirmability is accomplished by standardizing procedures as much as possible (e.g., audiotaping interviews, verbatim transcripts, interview schedules) and recording all insights, design decisions, logistical decisions, and peer debriefing sessions. Lincoln and Guba (1985) recommend that this material be recorded in a 'reflexive journal'. This would enable research consumers to evaluate influences on the research process that are typically not reported in orthodox science. Also included in the reflexive log is a chronicle of all peer debriefing sessions. Lincoln and Guba advocate this process, whereby researchers present their categorizations to neutral peers. This is intended to keep researchers 'honest', to keep their interpretations 'close to the data', and to ensure that the abstraction and categorizing processes are clear and explicit.

Transferrability is similar to the concept of external validity inasmuch as it is concerned with the applicability of research findings. In orthodox science, external validity is based on the generalizability or representativeness of a study. The ontological assumption behind this (i.e., naïve realism) is that there is such a thing as a population 'out there', and that the researcher somehow has knowledge of it. Qualitative researchers reject this assumption and favour the assumption of multiple constructed realities. They posit that all a researcher can really know is their own findings, which

they call the 'sending context'. They also assert that those situations where their findings apply (the 'receiving context') can never be known in advance. As a result, qualitative researchers only profess to know about their own samples, and they leave transferability judgments up to the consumers of their research - who assess the contextual similarity of the sending and receiving context. As such, it is the qualitative researcher's task to provide sufficient detail on their studies to enable consumers to make these comparisons. To do this they provide a 'thick description' of their samples, which usually consist of a small number of research participants within a specific setting (Rudestam & Newton, 1992). While cognizant of the orthodox threats to generalizability like selection bias, setting, and history / cohort effects, qualitative researchers make little effort to minimize them. Instead, they accept them as inevitable conditions of research. As such, generalizations based on qualitative research must always be modest and based on a thorough examination of the context in which the data were generated.

Epistemological Features of the Current Study

The current study used a hermeneutical approach to examine sources of sport commitment and sport enjoyment. The data were organized with the aim of interpreting raw quotes to create a thematic hierarchy based on the researcher's conceptual repertoire, clinical experience, and experiential knowledge of sport.

This was conducted through an iterative process of interpreting and reinterpreting the data, each time with an increased and more differentiated understanding. Described as 'constructive hermeneutics' (Winograd & Flores, 1986; as cited in Rudestam & Newton, 1992) this process fuses the perspective of the phenomenon (as described by the research participants) with the perspective of the interpreter. It is contrasted with

'objective hermeneutics', where text is believed to contain meaning independent of the interpreter (as in exegesis, the interpretation of scriptural texts). In any case, in constructive hermeneutics the unique talents, experiences, and insights of the researcher are deliberately invoked to produce a detailed and informed understanding of that which is observed. As Mahoney (1990) stated, "new or changed meanings arise from the active encounter of the text and its reader" (p.93). One of the more popular methodologies in constructive hermeneutics is grounded theory. This was the approach used in this study. A general description of grounded theory appears below.

Grounded Theory

Originally developed by Glaser and Strauss (1967), grounded theory is a method for generating theory in topic areas difficult to access using orthodox (i.e., positivistic) methods. It was initially developed in response to sociology's purported tendency toward deductive, armchair theorizing. In this regard sociology was perceived to have become a procrustean enterprise that forced data to fit into existing theories. Grounded theory was developed to allow theories to emerge from data, with minimal reference to pre-existing theory. While it has shown some promise in sociology and education, grounded theory is relatively new to mainstream academic psychology. Nevertheless, it has been applied to client experiences of psychotherapy, client evaluations of family therapy, and lesbian self-disclosure to health professionals (as cited in Rudestam & Newton, 1992).

The essence of grounded theory is the inductive examination of textual information. This is typically obtained from interview protocols, file records, or bibliographic material. As these data tend to accumulate quickly, the first challenge for

researchers is to “make sense” of it. This is accomplished through an iterative process of unitization and categorization. Unitization is the process of identifying a unit of analysis, or ‘meaning unit’. This may be an entire passage, a single quote, a single theme, and so on. The unitization process varies across researchers and hence, must be made explicit in the research manuscript.

Once unitized, these meaning units are sorted into clusters on the basis of their thematic similarity. The shared meanings are then lexically symbolized. These symbols constitute a category. In the early stages of data analysis, these categories are largely descriptive. They represent abstractions from the data of the first order. As categories emerge, units are compared to each category and assigned to as many of them as possible. Called open categorizing, this process helps to preserve subtle nuances in the data, and it supplies the groundwork for the development of rich, dense theory (since a given unit may have multiple meanings). At the same time, the categories are themselves sorted according to their thematic similarities. These new groupings are in turn lexically symbolized, and they represent abstractions of the second order. These second-order categories are also grouped and labelled, to create categories of the third order. This process continues until no more abstractions can be made. This occurs when additional protocols reveal no new information, no new categories, or no new categorical relationships. Throughout this process, researchers are required to sort, resort, re-categorize, and reorganize the data on a continual basis. Called the constant comparative method, this process allows researchers to have an ongoing dialogue with their data, since the meaning derived from them is in an ongoing process of thematic generation, differentiation, and revision.

One implication of the grounded theory approach is that different researchers may obtain different findings from the same data set. While anathemic to orthodox science, this is an acceptable (and even desirable) outcome of qualitative research. In this regard different researchers may develop separate views of a given phenomenon, each of which may be credible within its own limits. The end result is a richer, more complex theory than could have been generated with a single analyst. This demonstrates the reactive impact of the researcher on the data analysis, and it bears more on the scope of the emergent theory than on its overall credibility. Given the relative homogeneity of [academic] training among psychologists, however, this purported variation in findings is likely to be somewhat limited. In this regard it is expected that considerable overlap would occur in findings generated across psychologists, regardless of their academic persuasion.

The Researcher as Instrument

As noted above, a researcher's background and relationship to the material are central to the hermeneutic process. In this manner the researcher interprets not only the text of a participant's response, but the subtext as well. This is a vital asset to the hermeneutic approach inasmuch as it enables the researcher to impose meaning on the data in a manner that closely corresponds to the lived experience of the participants.

From this, it becomes apparent that hermeneutical researchers are themselves the instrument of research. Therefore, orthodox psychometric concepts like standardized scoring and interpretation, factor structures, validation studies, and reliability coefficients are inapplicable. Despite this, hermeneutical researchers must still be explicit about the manner in which they "made sense" of their data. And in the same

manner that orthodox scientists describe their instruments, hermeneutical researchers must describe themselves. As a result, hermeneutic research manuscripts should provide explicit detail about the researcher's perspective on the data, in addition to a candid disclosure of their relationship with the topic of study. This should include information on their theoretical and ideological biases, their academic training, and their professional experience. It should also include any personal background information that influenced their choice of topic and their choice of research methodologies. By submitting this material, hermeneutic researchers empower their consumers by giving them vital information to assess the trustworthiness of the study. This material appears in the next section.

The Personal Context: The Researcher's Background

My graduate training was in clinical psychology. I have been engaged in supervised clinical practice for the last eighteen years. Most of this work was in forensic settings. I occasionally consult with athletes on performance enhancement issues. While I consider myself to be an eclectic theorist, the majority of my consulting work is cognitive-behavioural.

Throughout my graduate training I had had the good fortune of working as a Teaching Assistant and Sessional Instructor in courses on the history of psychology and on theory construction issues in personality psychology. These teaching assignments (and a graduate seminar) familiarized me with the fundamentals of the philosophy of science. This enabled me to make informed decisions regarding my own philosophical and theoretical orientation. In this regard I reject logical positivism as an exclusive means to understanding human experience. Instead, I adopt a social constructivist

perspective which asserts that for human experience, at least, there exist multiple constructed realities. While I recognize several levels of causality, I favour human-centered, agentic models akin to Aristotle's principle of Final Cause. From this I believe that people are largely self-determined and responsible for their thoughts, feelings, and behaviour. As a result I disagree with mechanistic and deterministic models of motivation, particularly as they apply to sport behaviour. At an axiological / ethical level, I believe that the purpose of science is to understand and to be useful. I believe that the ultimate purpose of psychology is to understand and improve the human condition. In this regard I endorse the 'prediction and control' mandate of orthodox science, as well as the 'understand, describe, and emancipate' mandate of qualitative research. Consistent with Martens (1987), I believe that orthodox science (and hence, mainstream psychology) has in some cases applied its methods indiscriminately and without sufficient understanding of the nature of the phenomena under study. And from this, I believe that qualitative research can improve this understanding and provide a solid, informed, context-relevant theoretical basis from which orthodox science may proceed.

The experiential knowledge I bring to this study is based on my background in competitive and recreational sport. In this regard I was involved in competitive sport from age eleven to thirty-two. I competed regionally in swimming and soccer. I competed provincially, nationally, and internationally in Judo. I was on the Canadian National Judo Team from 1984 to 1992. While on Internship in 1993 I competed for the State of Florida. I retired from active competition later that year. After that I took up recreational snowboarding and white-water kayaking. I participate in these activities to this day. I am currently training for my first marathon.

Given my academic training, my philosophical-theoretical orientation, my clinical experience, and my sport background, it is easy to see why I chose a constructive hermeneutic approach for this dissertation. This approach enables me to draw on my knowledge and experience from several life domains relevant to sport. While hermeneutic research is a good fit for me, it is also a good fit for research on sport commitment. For example, research on the sport commitment model is in its infancy, and considerable theoretical / conceptual work has yet to be done. This makes a hermeneutical approach to this topic particularly salient and timely.

The following sections describe the specific procedures followed in this study.

Methods

The current study used a constructive hermeneutic approach to examine sources of commitment and enjoyment for actively competing elite athletes. The data were obtained from in-depth semi-structured interviews. These interviews were transcribed verbatim and subjected to inductive content analyses consistent with grounded theory.

The purpose of these analyses was threefold:

- To determine if constructs from the sport commitment model and the sport enjoyment model generalized to the current sample
- To extend and / or revise these constructs
- To discover additional sources of sport commitment and sport enjoyment

Instrumentation

Design of the Interview Schedule

To enhance the confirmability of the study, a decision was made to use a standardized interview schedule to ensure that all participants would be asked the same questions in the same sequence. In an attempt to standardize the depth and complexity of responses, it was decided that a minimum of two probes would be used for clarification or elaboration purposes.

The interview schedule was fashioned after the one used by Scanlan, Stein, and Ravizza (1989) in their study on sport enjoyment. Significant revisions were necessary, however, to incorporate the remaining constructs of the sport commitment model. In this regard, interview questions were derived from the Sport Commitment Survey (Scanlan, Simons, et al. 1993). These items were transformed from a Likert format so they could be presented as open-ended or guided interview questions.

A copy of the interview schedule appears in Appendix A.

Once the interview schedule was completed, it was field tested on three associates of the author. These people were asked to comment on the clarity of the questions, the sequence of discussion topics, the flow of the interview, and the mannerisms of the interviewer. Based on this feedback, adjustments were made to the content and process of the interview. The end result is as follows:

Phase 1 (Introduction and Orienting Instructions) was intended to establish rapport, to inform participants about the purpose and nature of the study, and to orient them to the task at hand. Participants were informed about the researcher's credentials, the intended use of the data, and the reasons for audiotaping the interview. They were

also assured that their participation in the study (and their interview disclosures) was confidential. They were informed about the process and content of the interview, and they were given the opportunity to withdraw without consequence.

After providing informed consent, participants were given two orienting instructions. First, they were told that they would be asked to comment on their sport experience this season, and not at any other period in their life. Second, they were asked to comment on their entire sport experience. As such they could comment on their competitive experiences, their training experiences, and anything else related to their involvement in sport (e.g., traveling, socializing).

In *Phase 2 (Sources of Enjoyment)* participants were presented with the operational definition of enjoyment used by Scanlan, Stein, and Ravizza (1989). They were then asked if they understood the question. If they did, they were asked an open-ended question about the major causes or sources of enjoyment in their overall sport experience. After all sources were given, each of them was explored with elaboration and / or clarification probes.

Phase 3 (Sources of Commitment) was identical to Phase two, except that participants were asked to comment on their sources or causes of sport commitment. To avoid leading participants with content from the guided questions, the open ended questions were presented consecutively (i.e., enjoyment, then commitment). Enjoyment was discussed first to enhance rapport by starting with a positive topic.

In *Phase 4 (Guided Questions)* participants were asked a series of guided questions. To maintain continuity with Phase 3, the questions pertained to sport commitment. These questions focused on constructs of the sport commitment model other than enjoyment (i.e., involvement alternatives, personal investments, social

constraints, and involvement opportunities). The guided questions were created by blending the definitions used by Scanlan et al. (1989) and questions appearing on the Sport Commitment Survey (Scanlan, Simons, Carpenter, Schmidt, & Keeler, 1993). As in Phase 2 and 3, each participant response was queried with at least two elaboration probes.

Phase 5 was identical to Phase 4, except that participants were asked guided questions on sport enjoyment. The questions were based on the enjoyment sources identified in Scanlan, Stein, and Ravizza (1989). These questions were created by blending the descriptions reported in Scanlan et al. and questions appearing in the Sport Enjoyment Survey (Scanlan, Carpenter, Lobel, & Simons, 1993).

In *Phase 6 (Conclusion)* participants were asked to share their insights on sport enjoyment and sport commitment (i.e., advice for coaches, athletes, and parents). They were also asked to provide feedback on the interview experience. In addition to collecting data, this phase was designed to enable participants to disengage from the interview by focusing on less personal material.

Procedures

Participants: Recruitment Procedures

Research participants were recruited from a population of varsity university athletes. To maximize the variance of the data, participants were chosen from a variety of sport types. For the same reason, no attempt was made to control for demographic variables like age, gender, experience level, level of competition, or length of involvement.

Participants were recruited through their coaches. These coaches were receptive to the research process as they had previously received sport psychology services from the author's senior research supervisor.

For logistical reasons the recruitment process was not uniform. Some athletes were recruited in person at their practice facility. This was only possible for teams who were 'in season' at the time. The remaining athletes were recruited by telephone from lists provided by their coaches.

Once contacted, each athlete was subjected to the induction procedure described above. If the athlete consented to participate, an interview was scheduled.

Participants: Composition of the Sample

As is common in qualitative research, the required sample size was unknown in advance of the study. This decision was left to the discretion of the researcher, and it was guided by the following criteria (Lincoln & Guba, 1985):

- Exhaustion of information sources
- Saturation of categories (i.e., no further thematic differentiation)
- Emergence of regularities
- Overextension / redundancy of information

Based on these criteria, data were obtained from twenty-five participants. They were represented by the following sports: wrestling (8), basketball (3), soccer (5) track and field (5), and football (4).

The sample consisted of twenty-two males and three females. The mean age was 21.24 years ($SD=3.47$). The mean duration of involvement in their respective sport was 10.86 years ($SD=3.72$). Seven participants competed at the intercollegiate level.

Six competed at the national level. Seven competed internationally, and five competed at the World Championship / Olympic level.

Interview Procedures

All interviews were conducted in a small, private room on campus. Upon arriving, each participant was required to read a consent form reminding them of the nature and purpose of the study. A copy of this form appears in Appendix B.

Each interview lasted approximately one hour. All interviews were conducted by the author. They were all audiotaped. Each interview was transcribed verbatim by volunteers and students hired from the university community. An electronic transcriber facilitated the process.

Data Analysis

Inductive Content Analysis: To prepare for the analyses, each transcript was read while the corresponding interview was played on audiotape. This was done to re-familiarize the researcher with the participant, and to take note of any verbal inflections, emphases, or affective cues that would not be evident on the transcript.

After that, the basic unit of analysis was defined. In this case, the units were verbatim quotes from the transcriptions. Each quote was defined as “a statement made by the subject which was self-definable and self-delimiting in the expression of a single, recognizable aspect of the subject’s experience” (Cloonan, 1971, p. 117; cited from Scanlan, Stein, & Ravizza, 1989). Using this guideline, a total of 2051 quotes were identified. They varied in length from one word to one sentence to one paragraph. These quotes served as the database for the inductive content analysis.

Beginning with the first transcript, all units were clustered according to their thematic similarities. These similarities were defined as the emergent themes of the first order. The clustering process involved comparing and contrasting each quote with all other quotes and emergent themes. The objective was to unite quotes with similar meaning and separate quotes with different meanings. While computer programs are available to assist this process (see Fielding & Lee, 1998; Weitzmann & Miles, 1995), all clustering (and subsequent categorization) was performed manually. This was done to detect multiple levels of meaning (i.e., connotative as well as denotative) and to avoid losing information related to context or delivery (i.e., affective cues, emphases, etc.).

In any event, the clustering process was repeated until all quotes were organized according to their first-order emergent themes. These themes were then grouped according to their own thematic similarities. These were defined as the second-order themes. This process continued until no further themes could be abstracted. The end result was a thematic hierarchy with several levels of abstraction. This hierarchy served as the framework for the inductive analyses of the remaining transcripts. Using the constant comparative method, quotes from each subsequent transcript were compared to the existing framework. As a result some categories were filled, others were redefined, some were fused together, some were subsumed into other categories, and some were abandoned outright. Throughout the analyses the overall thematic hierarchy was under constant revision. This process continued until all transcripts were analyzed.

One problem with the constant comparative method is that the categorization process is not uniform for all transcripts. This is because the thematic hierarchy is evolving as the analyses proceed. As a result, categories identified at the beginning of the analysis could contain quotes better suited to a different category that was identified

later in the study. To address this issue the entire data set was re-analyzed to (a) reassess the existing categories, (b) content analyze each category for thematic 'purity', and (c) fine-tune and (yet again) modify the emergent categories. In all, the entire data set underwent twenty-six full-scale iterations, with several (partial) revisions in between.

Frequency Distribution

The enjoyment and commitment categories obtained from the inductive content analyses were the main results of this study. Nevertheless, a frequency count was calculated for all categories to convey their popularity (or salience) across the sample. These data could be useful for future researchers interested in quantifying the results of this study. Since they were not the focus of the study, they are not presented or discussed in the text of the manuscript. Instead, they appear in Appendix C.

Trustworthiness Measures

To enhance the study's confirmability, all aspects of the inductive content analysis were consensually validated. This consisted of meeting with academic colleagues, fellow sport participants, and a research committee member to discuss the author's unitizing and categorizing process. These discussions were designed to ensure that the author's categorizations were understandable and explicable. They were also intended to limit the extent of the author's inferences, and to keep his interpretations "close to the data."

Coding Reliability / Consistency Check

A student was solicited from an undergraduate sport psychology class. He was selected from a pool of candidates on the basis of his familiarity with the general sport psychology literature, and on his personal experience as a high-performance athlete.

The student was introduced to the literature that formed the background for this study. To improve his familiarity with the material, weekly discussions were conducted over a period of several months.

The student was introduced to the conceptual categories derived from the inductive content analyses. Several discussions ensued with the aim of explicating the meanings of these categories. Practice sessions were conducted where the student was required to place raw quotes into the appropriate category. This led to numerous discussions on the rationale for these placements.

When the student was considered to be sufficiently trained, he coded randomly selected quotes into categories at the second or third levels of abstraction (depending on the complexity of the superordinate construct). He then coded these categories into themes at the fourth level of abstraction. Reliability was assessed by computing the concordance rate between classifications made by the student and those made by the researcher. The student coded 102 raw quotes (5% of the raw data) and 53 second / third-level themes (the entire set of thematic data). The concordance rate was 93% for the raw quotes (95 of 102) and 94% for the second / third level themes (50 of 53).

RESULTS

Introduction

As is common in qualitative research, the current study generated a considerable volume of data. For ease of presentation, these data are discussed over the course of ten sections.

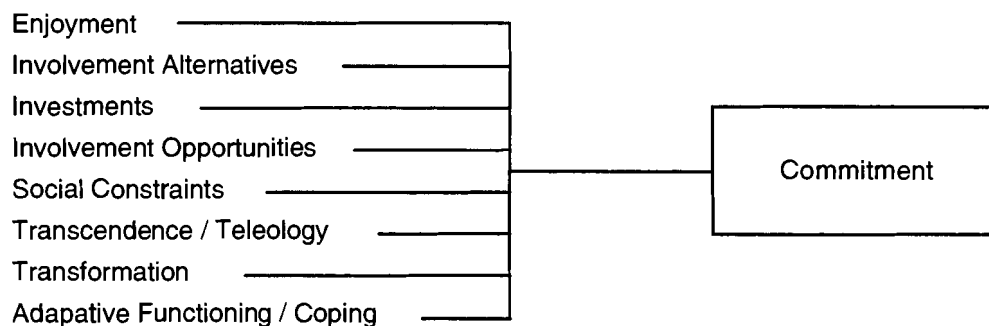
The first section contains a brief overview of the major thematic constructs. These constructs represent the highest level of abstraction to emerge from the data set. The next eight sections discuss each of these constructs in terms of their component themes. All levels of abstraction are represented. In most cases, raw quotes are included to provide a rich, “thick” description of the emergent themes. They were also included as a trustworthiness measure to enable the reader to assess how “close” the emergent themes were to the data. Raw quotes were not included in cases where the full meaning of a category was evident by its label.

The final section includes a summary of the entire data set, with some comment on their relation to the proposed research questions.

Section 1: The Highest-Order Constructs of the Revised Sport Commitment Model

As shown in Figure 2, all constructs from the original sport commitment model are replicated. Three additional constructs emerged. All eight constructs are described below:

Figure 2. The Revised Sport Commitment Model



Enjoyment consists of five major themes, reflecting enjoyment sources roughly similar to those reported by Scanlan, Stein, and Ravizza (1989). The first theme refers to enjoyable kinaesthetic feelings associated with the sporting activity itself. The second theme refers to social opportunities afforded by sport. The third theme refers to feelings of perceived competence resulting from mastery and competitive success, while the fourth theme refers to sport-contingent social recognition. The final theme refers to enjoyable unique experiences, and to privileges resulting from sport involvement.

Involvement Alternatives refers to the availability and attractiveness of alternative activities. It also includes themes reflecting the pressing quality of existing alternatives, regardless of their attractiveness (e.g., family obligations).

Investments refers to the nature and scope of sacrifices made in the name of sport. It also includes themes reflecting investment expectations and the perceived commensurability of investment returns.

Social Constraints includes themes related to an athlete's perceived locus of control. It refers to internal constraints like feelings of obligation to significant others, team-mates, coaches, or sport organizations. It also includes a sense of duty from making publicly stated commitments.

Involvement Opportunities consists of themes related to valued (and anticipated) psychological, physical, social, and tangible benefits from sport participation.

Transcendence / Teleology refers to an athlete's attraction to the opportunity to transcend oneself. This construct reflects a general desire to grow, to improve, and to transcend oneself irrespective of sport. It arises from quotes like "I like to achieve; when I've retired from track, I'll find something else to achieve in." This construct also reflects how sport provides some athletes with a purpose, a dream, or a goal. These participants indicate that sport provides them with an overarching purpose and meaning to their lives, to the point where all their activities revolve around it.

Transformation refers to the formative aspect of sport, representing its role in personality and character development. It is reflected in statements like "sport made me what I am," and "I like the values that sport instilled in me. It taught me valuable life lessons and living skills."

Adaptive Functioning / Coping refers to the functional nature of sport inasmuch as it regulates mood and facilitates coping. This coping could be adaptive or maladaptive, as reflected in statements like "I'm aggressive by nature, and football lets me vent this" and "I'm a solitary person, and running allows me to be alone." It is also

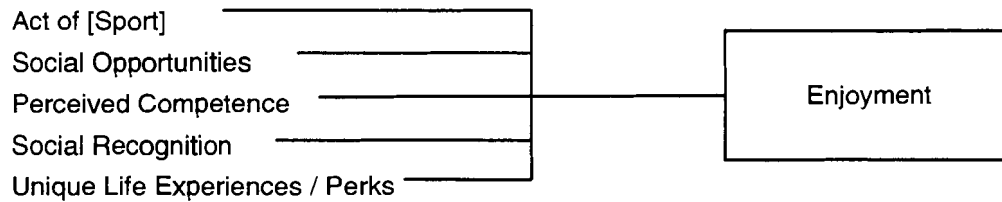
reflected in statements like “wrestling is a good stress reliever” and “track helps me deal with the stress of schoolwork.”

The following chapters describe the component themes of each of these constructs in detail. Some of these components are similar to those reported in previous research. This is particularly the case for sport enjoyment. Several of these components were revised, however, and these changes are noted. Special attention will be paid, however, to emergent categories, themes, or constructs that are new to the literature.

Section 2: Enjoyment

Consistent with previous research, enjoyment is defined as an affective response to the sport experience reflecting feelings such as liking, pleasure, and fun (Scanlan & Lewthwaite, 1986). An important feature of this definition is that enjoyment is defined as a *response* to events that have already occurred. In this regard enjoyment is construed as an immediate and transitory reaction to the sport experience itself. In this way it is differentiated from anticipated desirable consequences (as in the *involvement opportunities* construct), and from enduring contentment or life satisfaction (as in the *transcendence / teleology* construct).

As noted in Figure 3, the enjoyment construct consists of the following component themes: act of [sport], social opportunities, perceived competence, social recognition, and unique life experiences (i.e., perks). Each of these is described below.

Figure 3. Enjoyment

Act of [Sport]

This theme is related to the kinaesthetic experience of sport performance. It refers to the motor performance of sport and to the experience of competition. It also refers to states of consciousness resulting from intense involvement and absorption in the sport activity itself. Act of [Sport] consists of the following categories: the drama / excitement of competition, movement / sensation experiences, athleticism, the structure of the activity, and flow. Given its detail and complexity the thematic hierarchy for the Act of [Sport] theme appears in Appendix D1. Each of its components is described below.

The drama / excitement of competition refers to desirable and / or pleasurable aspects of the competitive experience. These include the following:

- Taking chances (i.e., risky moves), playing for high stakes
- Facing dramatic / glorious circumstances (i.e., from close, intense competition)
- Experiencing an adrenaline rush (i.e., from scoring, competing)
- Experiencing pre-competition jitters / excitement
- Performing 'big' plays / spectacular manoeuvres

Movement / sensation experiences refers to kinaesthetic sensations and feelings of exhilaration associated with the movement experience of sport. It arises from quotes like “Certain techniques feel good when I do them; once I get good at them I’m really smooth ...and then it feels good “; “[I like] the motions of running...running out in a forest...the rhythm...the quiet.”

Also included in this category is the experience of being on an ‘endorphin high’- “You feel kind of...high I guess...excited, it makes you feel happy, puts you in a good mood.”

Athleticism is a construct similar to that reported by Scanlan et al. (1989). It consists of two categories: athletic process and athletic outcome.

Athletic process refers to pleasurable feelings resulting from performing strenuous activity and from exerting a maximal effort - “I get enjoyment from the intensity of it...from working hard”- “nothing beats the feeling of...just putting everything into that game.”

Athletic outcome refers to pleasant feelings associated with the immediate consequence of strenuous exertion in a competitive setting. It reflects a sense of tension release from the drama of competition or from pre-competition anxiety – “It is a sense of relief that comes after you have all this built-up stress...but after that match is done...it is just that sense of relief...that is almost a natural high. It’ll last for a few hours after.”

Structure of the Activity is a theme new to the literature. It refers to appealing aspects of an activity that are specific to a given sport. It consists of two themes: attractive sport-specific features, and personal / individual focus and responsibility.

Attractive sport-specific features includes the following categories:

- A sport for all body types (e.g., wrestling)
- Grappling / play-fighting (e.g., wrestling)
- A 'natural' activity with no apparatus or equipment (e.g., wrestling and running)
- Impartial / objective judging (e.g., wrestling)
- Aggressive, high scoring North American style of play (e.g., basketball)
- Lots of scoring (e.g., basketball)
- Getting / handling the ball (e.g., soccer)
- A solitary activity (i.e., running)
- An outdoor activity (i.e., no boundaries)

Personal / individual focus and responsibility refers to the manner in which a given sport fosters a sense of personal control, autonomy, and self-determination. It is similar to Deci and Ryan's (1985) concept of self-determination. Interestingly, in the current study is reported by athletes in individual as well as team sports. It consists of the following themes:

- 'Personal' wins (i.e., manhandling an opponent, as in wrestling)
- Limited coach involvement / team politics (i.e., during competition, as in wrestling)
- Personal responsibility for outcomes (in individual sports)
- Making my own contribution (in team sports)
- Personal responsibility for training and challenging myself (i.e., individual sports)

Flow is consistent with the construct described by Csikszentmihalyi (1990) in his work on the psychology of optimal experience. According to Csikszentmihalyi, flow is an inherently enjoyable experience typified by deep concentration, a loss of self, and an optimal level of physical or intellectual functioning. Not surprisingly, flow has begun to

appear in the sport psychology literature (e.g., Jackson & Csikszentmihalyi 1999; Jackson, 2000). In the current study several themes emerge that are consistent with several dimensions of the flow experience. These include the following:

A merging of action and awareness: This theme reflects the seemingly effortless and flawless nature of sport performance when in a state of flow. It consists of two categories. The first refers to the experience of smooth, effortless skill execution - "you executed it really well and it seems so damn easy, and it feels good when that happens" - "like you are floating and everything comes to you so easily...it is exhilarating." The second category is similar, but occurring within a team context. It refers to situations where a team functions in harmony, with seemingly little effort, deliberation, or communication - "the team gets together, smoothes together, like the machinery starts to work" - "it's that sort of integration that goes on where everybody is working together, and the stuff we're practicing that actually works...it's always more fun when everybody's just clicked together and the execution is working."

Paradox of control: This refers to the conative component of flow. It consists of two themes. The first reflects a sense of automatic functioning, as in performing a task without thinking about it - "like playing the piano. Sort of the same thing in wrestling...you could be playing and you did not need to think about it...it would just flow, sort of" - "there are times in a game where I'll do something that I won't remember...and if someone asks me to do it and I have to think about it, then there's not a chance I'm going to do it." The second theme refers to a more deliberate sense of control, as in controlling or dictating the course of a match, albeit with seemingly little difficulty or exertion.

Autotelicism: This theme is also related to conation, albeit at a teleological level. It refers to behaviour performed for its own sake, for the sheer pleasure inherent in the activity itself. According to Csikszentmihalyi (1990), autotelic behaviour is inherently enjoyable and likely to induce flow. In the current study, autotelicism is reflected by the category of fun / playfulness / loving it - "we wrestled because we liked to do it; not because we had to" – "I've always enjoyed playing...not as a means to an end, but just as a means in itself" – "nothing has to come out of it other than the enjoyment that I get from those two hours of playing the game."

Challenging / requires skill: According to Csikszentmihalyi (1990), this is one of the central and necessary conditions for flow. It refers to an optimal balance of skill and task demands. If skills and challenges are in balance, athletes will experience flow. If they are out of balance, athletes will experience boredom or fear. In the current study, respondents indicate that enjoyment (and seemingly flow) is affected by activities with the following properties:

- Physical / technical demands - speed, strength, endurance, agility, skill
- Tactical demands - "with strategy there's enjoyment...figuring an opponent out" – "a physical chess match, trying to dictate your style onto someone else"
- Mental demands - "the toughness of competition...dealing with the nerves"
- Competitive demands - "being in a game that's really close"

Respondents also indicate that enjoyment results from facing challenging opponents and from being well prepared.

Absorption: This theme refers to an athlete's level concentration and immersion in their activity. It reflects a state of intense concentration, and it is associated with a

seeming loss of self-consciousness - "it's like a Zen experience; it requires your full attention" – "I block out whatever else is happening in my life" – "you feel like you're in a zone type of thing...you just completely focus on the task at hand...."

Goals and feedback: This theme refers to an athlete's ability to direct their efforts, monitor their progress, and measure their success. It consists of (1) having tangible feedback on progress / on how to improve, and (2) having a specific, individual task or assignment (i.e. in team sports).

Transformation of time: This theme refers to the manner in which flow alters an athlete's perception of time. Two participants describe this phenomenon. The first (a wrestler) reports how time slows down when executing techniques. The second (a triathlete) reports how time speeds up during a race, particularly when attending to external factors like his placing, his opponents' pace, weather conditions, scenery, etc.

Being creative / dynamic: While not explicitly identified as a precursor to flow, Csikszentmihalyi (1996) recognized that flow and creativity frequently coexist. In the current study this is reflected by the theme of inventing moves / being creative. This was reported by athletes in 'open task' sports, where their playing field is changing continually (e.g., wrestling). Under these circumstances athletes are called upon to adjust to constantly changing environmental demands (i.e., an attacking opponent), which requires them to sequence and / or invent manoeuvres on a moment-to-moment basis - "I am always looking to do new things...put a move together and a combination that's not normally done" – "developing your own style of wrestling" – "creating something that people are just going 'what the hell is he doing'" – "you try something new and it works, you can kinda give yourself a pat on the back and say "okay, well done" kind of thing."

Social Opportunities

This theme refers to enjoyable social aspects of the sport experience. It is related to an athlete's relationships with coaches, team-mates, and peers. It is also related to positive leadership experiences. This latter theme is new to the sport enjoyment literature. The thematic hierarchy for social opportunities is presented in Appendix D2.

Social opportunities consists of two main themes: guidance / leadership experiences, and general social experiences.

Guidance / leadership experiences refers to two types of experience: receiving leadership and providing leadership. It consists of two themes: coaching style and mentor / pupil experiences. Coaching style consists of three categories: authoritative coaching, authoritarian coaching, and personal compatibility with coaching style.

Participants indicate that authoritative coaches provide support, encouragement, and guidance. They also welcome athlete input into coaching decisions, and their relationship with athletes is largely collaborative. They also adopt an individualized (i.e., customized) approach to training. Authoritarian coaching is defined in essentially opposite terms. Authoritarian coaches are viewed as autocratic, critical, and antagonistic – “having him say something nice to you would be a miracle...he's just so negative...he's not flexible at all...and him just, just poundin' at ya, it's just too much for some people.” Authoritarian coaching was identified by one participant as a significant detractor from his overall sport enjoyment – “I think he's just a prick...he's a total asshole.” It should be noted, however, that this sentiment is not unanimous across the research sample. Some athletes state that they do not mind an authoritarian coach,

while others indicate that they prefer this kind of coach. This underscores the relevance of the compatibility category, as it challenges the widespread belief in the universal superiority of an authoritative coaching style. Rather, it implies that neither coaching style is universally indicated or effective- “I guess that’s his coaching style. It works for some people, but it doesn’t work for me.”

Mentor / pupil experiences consists of three categories. The first category refers to mentoring / coaching rookies or junior players – “I could see the freshmen doing things that I did wrong...not only basketball...off the court too...so as a senior it’s kind of nice to be able to say ‘listen, that’s not the path you want to go down, that’s the wrong thing you’re doing, don’t take it [criticism] so personal...you become almost like a teacher” – “you want to be a role model by the time you’re a senior.”

The second category is related to the experience of being mentored by veterans and alumni – “some of them played professional...and I could talk to them about their experiences...listen to them and take advice from them.” The final category refers to the experience of being mentored by a coach – “...having discipline...and also having someone to talk to you and to help you somehow make sense of the world...my coach, I learned a lot from him” – “it’s always given me a role model...somebody who you can look up to, who is always going to watch over you too, and make sure you’re not screwing yourself up too bad.”

Social experiences consists of two main themes: camaraderie and social support / encouragement. Camaraderie is related to positive social experiences within the sporting community. It consists of four sub-categories: empathic relationships with team-mates, close intimate relationships with team-mates, regular and varied social contact, and a sense of community / ‘civic pride’.

Empathic relationships is defined by the following:

- having a common experience base - “You go through the same experiences, you share the same ups and downs “ – “No one else really understands what you’re going through except for those other 17-18 guys on the team, and so that in itself bonds you together...when you experience those emotions with other people that know exactly what you’re going through, it brings you closer together.”
- being like-minded (i.e., with similar views and interests) – “Track athletes have a different frame of mind than most people...I could more easily become friends with a track person” – “sort of an athletic culture” – “soccer players all kinda seem to have the same mentality...you just kinda click...if I go out and there’s barbecues and social events...I usually end up with the soccer players of the group...there is some kind of hidden bond there.”
- having common, similar, or shared goals - “being part of something that’s uniting you, and you’re all working together to achieve that goal “ – “we’re all working together to that one goal...everyone is part of the puzzle” – “we’re all driven, we all want to do really well” – “we’re all trying to improve ourselves.”
- having an appreciation of the commitment and effort invested in meeting those goals - “people don’t realize what has to be done to be an Olympic team member“ – “fellow athletes know what you’re going through and what it takes to get to your level...they know how hard you work.”

In contrast to the above, one participant reports how social interaction with team-mates is a detractor from his sport enjoyment – “these people, I don’t even know ’em, really...going on trips, it’s kind of awkward...I’m a lot older than these guys...and we just have separate interests...and I don’t really enjoy being around them“ - “there’s a huge age gap in university and a huge generation gap... .” The meaning abstracted from these quotes is ‘estrangement from team-mates’. While only reported by two participants, it is important inasmuch as it illustrates how social involvement with team-mates is not always considered a positive source of enjoyment.

Close, intimate relationships is defined by (1) constant, close contact with team-mates (i.e., while training and traveling) – “you spend so much time together, twice a day

training, in a room...and competitions...you go on all the trips together,” (2) close, caring relationships – “you know them in every situation...you could pretty much tell them anything” – “there are few people in the world...that I would know better than my teammates...and most of them, they stay friends for life,” (3) egalitarianism, loyalty, and respect – “we’re pretty much equal in front of each other” – “most guys take their teammates really seriously and would do pretty much anything for their really good friends on the team” – “we all think so highly of each other,” (4) sharing new experiences – “traveling in third world countries...no one else is there for you...living with them, like brothers,” and (5) sharing adversities and triumphs – “we go through hell and back...we see each other at our personal lowest points and highest points” – “being in the locker room after a win...everyone is happy and everyone is in a great mood...it’s just the best feeling there is.”

Regular, varied social contact consists of four categories: these include (1) having a large social circle -“you’re around lots of people...cool people “ – “I’ve met so many people...that I otherwise...wouldn’t have met” – “I’ve met probably over one hundred guys who used to play here...everywhere you go you see someone you know,” (2) frequently socializing with team-mates -“we all go out, hang out “ – “a lot of parties” – “go out as a team...blow off some steam,” (3) competing alongside my friends -“all the friends that are made on the team...it relieves a little pressure...if I was playing on the field with somebody that I didn’t really like...I’d have problems“ – “because we were a lot closer...it just meant a lot more,” and (4) meeting athletes of the opposite sex - “two of my more long-term girlfriends...have been soccer players...playing co-ed soccer...you’re obviously going to meet them...the men’s and women’s varsity teams

are fairly close...right there's a group of eighteen girls that you have access to...plus then you get to know some of their friends.”

A sense of community / civic pride is a theme new to the sport psychology literature. It refers to positive feelings arising from a sense of affiliation or belonging. It consists of three themes, including (1) a sense of community / fraternity “it’s almost like a brotherhood “ – “before school even starts, you know eighty guys...whenever you need something...there’s always somebody who knows someone...you see that with the alumni...coming back to help guys out,” (2) team cohesion and solidarity “everybody looks out for each other...back you up...there’s that respect...you look out for one of your own “ – ,” and (3) satisfaction from giving back / contributing to the athletic community “a lot of the younger guys see the older ones sticking around and helping. It helps out with the sport.”

Social support / encouragement consists of two main themes: support from the sport community, and support from the non-sport community. Support from the sport community refers to informational, tangible, and emotional support from coaches, trainers, team-mates, or fans. This support relates to personal and sport-related issues. Support from the non-sport community comes in the same forms, but from parents and non-sport peers like teachers and neighbours.

Perceived Competence

This construct is largely consistent with existing literature. It relates to personal perceptions of competence based on sport achievement. These perceptions vary according to the information source, and on the means of comparison from which competency standards were drawn. In the current study perceived competence consists

of three themes: mastery, competitive achievement, and performance achievement (i.e., putting on a show). The thematic hierarchy for perceived competence appears in Appendix D3.

Mastery is related to sport achievement that is self-referenced. The focus is on facing challenges, acquiring new skills, and progressing toward mastery goals. It consists of two categories that reflect the outcome and process components of the mastery experience.

Mastery outcome refers to feelings of satisfaction occurring as the result of successive mastery attempts. It consists of three themes: being good, overcoming challenges, and doing my best. Being good refers to positive feelings from having attained desirable levels of skill – “I like the fact that I know what I’m doing, and when I get the ball I don’t get all jittery...it feels so comfortable touching the ball.” Overcoming hardships / challenges refers to feelings of satisfaction from facing and overcoming the rigours of training and preparing for competition – “if you can get through school and still stand the wrestling season, you can accomplish anything.” Doing my best refers to feelings of satisfaction from devoting full effort and devotion to a task over an extended period of time – “at the end of it, when you are all done and through...you can be happy about the fact that you did your best and gave it all you had.”

Mastery process refers to experiences related to the actual performance of mastery attempts. Mastery process relates to positive feelings arising from (1) skill / performance improvement - “if you keep improving...especially on your weaknesses...that motivates you to keep trying...gives you confidence...it keeps you going,” (2) studying the game / learning from others - “learning about the game is one thing I enjoy...I have played underneath some good coaches...you can take some things

from each coach ,” and (3) adopting a businesslike, specialized, scientific, state-of-the-art approach to training and competing.

Competitive achievement is related to sport accomplishments defined through social comparison. As with mastery, it is differentiated into outcome and process components.

Competitive outcome is related to the end product of competition, like winning, losing, or placing. It consists of two categories: competitive success and competitive improvement. Competitive success is related to (1) conquering / smiting opponents - “it’s one thing to throw a basket through a hoop, but it’s another thing to take another human being and basically conquer them (i.e., wrestling)” - “it’s just the winning / losing aspect of facing an opponent...and going out and beating them (i.e., football)”, (2) demonstrating superiority over opponents - “I don’t want to be shown up...I don’t want anyone to out-play me “ – “it’s a pride sort of thing...you want to be better than the next person...so it makes you work harder”, (3) feelings of accomplishment from winning -“it feels like you’ve accomplished something...it’s a good feeling “ - “you start beating guys that were beating you...makes you feel a little better afterwards...I can pretty much take them down anytime I want now”, (4) winning / succeeding in and of itself -“I just love doing well“ – “I don’t go out to beat an opponent...to put him down by beating him...I just wanna come out on top”, (5) overcoming the challenges of competition, and (6) feelings of satisfaction from team success and winning championships – “It’s an awesome feeling...the best thing that can happen...you’ve been working so many hours and finally something concrete happens and everybody’s happy...and you see all the coaches and everybody just getting along after the game...it’s just a great moment.”

Competitive success is also related to feelings of satisfaction from competing at a high level, from being selected for high-level teams, and from contributing to a team's success.

Competitive improvement is related to feelings of satisfaction based on socially-referenced markers of progress. It consists of three themes: improved performance, improved ranking, and rating oneself against the best. Improved performance is measured by more wins, fulfilling more goals, and setting more personal records. Improved ranking is measured by changes in competitive standing, or by changes in one's standing on their respective team. Rating oneself against the best is measured by one's performance against high-level opponents - "to see where you rate with the rest of the world."

Competitive process is related to positive feelings and / or excitement arising from the competitive experience per se (i.e., independent of the outcome or result). It consists to two themes: competitive strivings and competing well. Competitive strivings includes positive feelings arising from close, head-to-head competition – "there's something about 'me against you...us against you'...let's go at it for a while...I love to do it" – ." It also arises from striving to demonstrate superiority and striving to prove oneself - "I want everybody in the crowd to think 'okay, he's the best out there'." And finally, it arises from fuelling personal or team rivalries - "you might not like that guy on the other team...that will get you to play harder."

Competing well is related to an individual's competitive performance, independent of the outcome. It consists of (1) fulfilling my assignment / doing my job (e.g., defending a zone), (2) playing to my potential, (3) successfully executing plays /

skills, (4) improved performance despite losing (e.g., staying competitive, losing by smaller margins), and (5) overcoming doubt / performing beyond expectations.

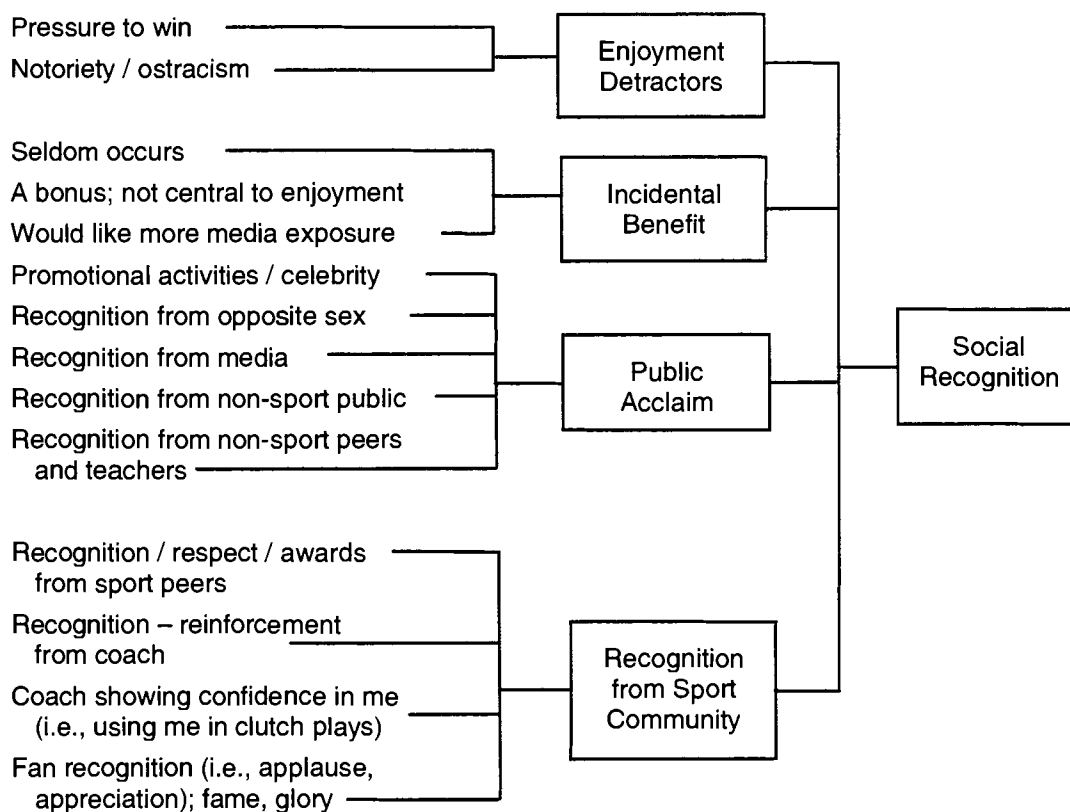
Performance achievement is related to social achievement / performance aspects of competition, independent of the competitive result. It is defined by the single theme of displaying one's skills to a crowd or audience - "I crave those situations where I can just get out and show my stuff...to display what I can do...when I wrestle well or beat a tough opponent...in front of my peers and coaches" – "it's like displaying all the work you put in...when we're down in the States we play in front of 18,000 people...it makes playing [basketball] enjoyable."

Social Recognition

This theme refers to positive or negative feelings arising from sport-related social recognition. It consists of four categories: recognition from the sport community, public acclaim, incidental benefit, and enjoyment detractors. The thematic hierarchy for social recognition appears in Figure 4.

Recognition from the sport community refers to social recognition from within an athlete's own sport community. It consists of four categories: (1) recognition / respect / awards from team-mates / sport peers – "they see the game the same way as you...they can analyze what you did... it has that much more meaning when it comes from a peer," (2) recognition / encouragement from coaches, (3) earning the coach's trust / confidence – "they believe in you...they're not afraid to give you plays or send you on the field," and (4) receiving fan recognition (e.g., applause, glory).

Figure 4. Enjoyment: Social Recognition



Public acclaim is related to social recognition from sources outside an athlete’s immediate sport community. This includes celebrity / participation in promotional activities (e.g., speaking to schoolchildren), and recognition from the media. It also includes recognition from non-sport peers (e.g., classmates and teachers), the non-sport public, and members of the opposite sex.

Incidental benefit reflects participant attitudes toward social recognition. Respondents indicate that while they value social recognition, it is not a routine (or central) component of their overall sport enjoyment. This is reflected by three categories

indicating that (1) it seldom occurs (2) it's a bonus, but not central to sport enjoyment, and (3) it would be good to have more media exposure.

Enjoyment detractors refers to unpleasant or negative aspects of social recognition. It consists of two categories. The first refers to social expectations / pressure to win - "when you play at the university, people expect that you win" - "in a small town...everywhere that you went you knew someone...and [their] expectations...it's just nice to get away." The second theme reflects a sense of notoriety and ostracism from being associated with a given sport or team - "up here [on campus] it seems that playing football...is seen as a negative thing...a lot of times once a teacher finds out...your life gets a lot harder...I've had a teacher come down and sit beside me while I'm writing an exam...you meet a girl...you're getting along...and then one of her friends says 'oh don't see him, he's on the football team'... ."

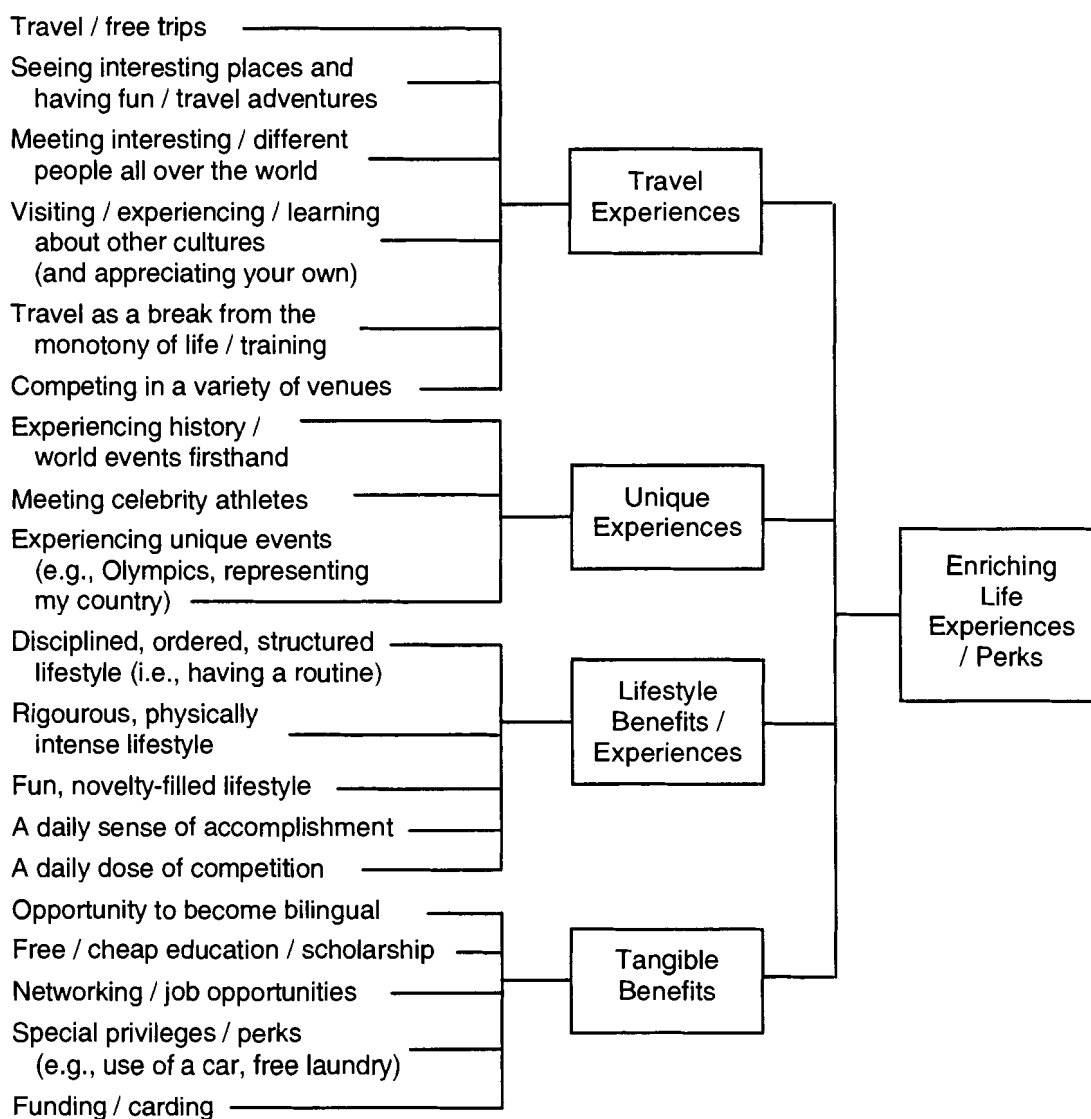
Unique Life Experiences / Perks

This theme refers to positive life experiences peripherally related to an athlete's participation in sport. These experiences are divided into four categories: travel experiences, unique events, lifestyle benefits, and tangible benefits. Their component categories are depicted in Figure 5.

Travel experiences consists of six categories. They are (1) getting free trips - "to places I would never go to otherwise", (2) travel adventures (e.g., staying in hotels, partying, playing golf, going to the beach) - "you come back, you always have a couple of stories to tell", (3) meeting interesting people all over the world, (4) experiencing / learning about other cultures - "I like going into other cultures and trying to live as they do" - "seeing how other people live...I am grateful for what I have", (5) competing at a

variety of venues - “to play somewhere else...to see different crowds and different kinds of players”, (6) breaking the monotony of daily life - “I get up in the morning, I go to school, I go to practice, I come home, I eat my dinner, I do homework, and I go to bed...that’s when traveling is fun...and a change.”

Figure 5. Enjoyment: Unique Life Experiences / Perks



Unique experiences refers to unusual / uncommon experiences contingent upon sport involvement. It consists of three categories. The first refers to the experience of viewing history / world events firsthand – “I saw East Germany before the wall fell...I was in Russia when Gorbachev was being overthrown...there was a town in Yugoslavia that was eight hundred years old. And now it’s dust...I went to Mongolia, and that might have been the start of all culture.” The second category refers to the privilege of meeting celebrity sports figures – “...Terry Venables, the English [soccer] coach, and Pele.” The third category refers to experiencing uncommon events (e.g., competing in the Olympics, representing one’s country) – “a lot of people respect Canada, and they ‘take’ to you, and are always asking you about Canada...and that was really good” – “playing for your country, that is pretty big...I guess everyone gets the feeling when they put the jersey on, it’s such a big honour.”

Lifestyle benefits refers to desirable living experiences inherent to being involved in high-performance sport. This reflects a lifestyle that includes (1) a disciplined, structured routine - “it gives me direction...and structure...the comfort of structured time”, (2) physically intense activity, (3) fun and novelty, (4) a daily sense of accomplishment, and (5) a daily dose of competition.

Tangible benefits reflects the experience of enjoying specific, concrete, perks as a result of sport involvement. These include (1) the opportunity to become bilingual, (2) a scholarship / free education, (3) networking / job opportunities, (4) special privileges (like the use of a car, free laundry, etc.), and (5) government funding / carding.

Conclusion

Enjoyment is identified as a major source of sport commitment for almost all participants in this study. Moreover, the current findings are consistent with previous research in demonstrating that high-performance athletes derive enjoyment from a variety of sources. The current findings also serve to replicate, extend, and / or differentiate a number of enjoyment sources identified in previous research. They also identify enjoyment sources new to the literature.

The next four sections contain descriptions of the thematic hierarchies for the remaining constructs in the original sport commitment model. Before the current study these constructs had not been studied qualitatively, and they had not been subjected to inductive content analysis. In this regard the following chapters 'break new ground' as they serve to explicate and extend these constructs.

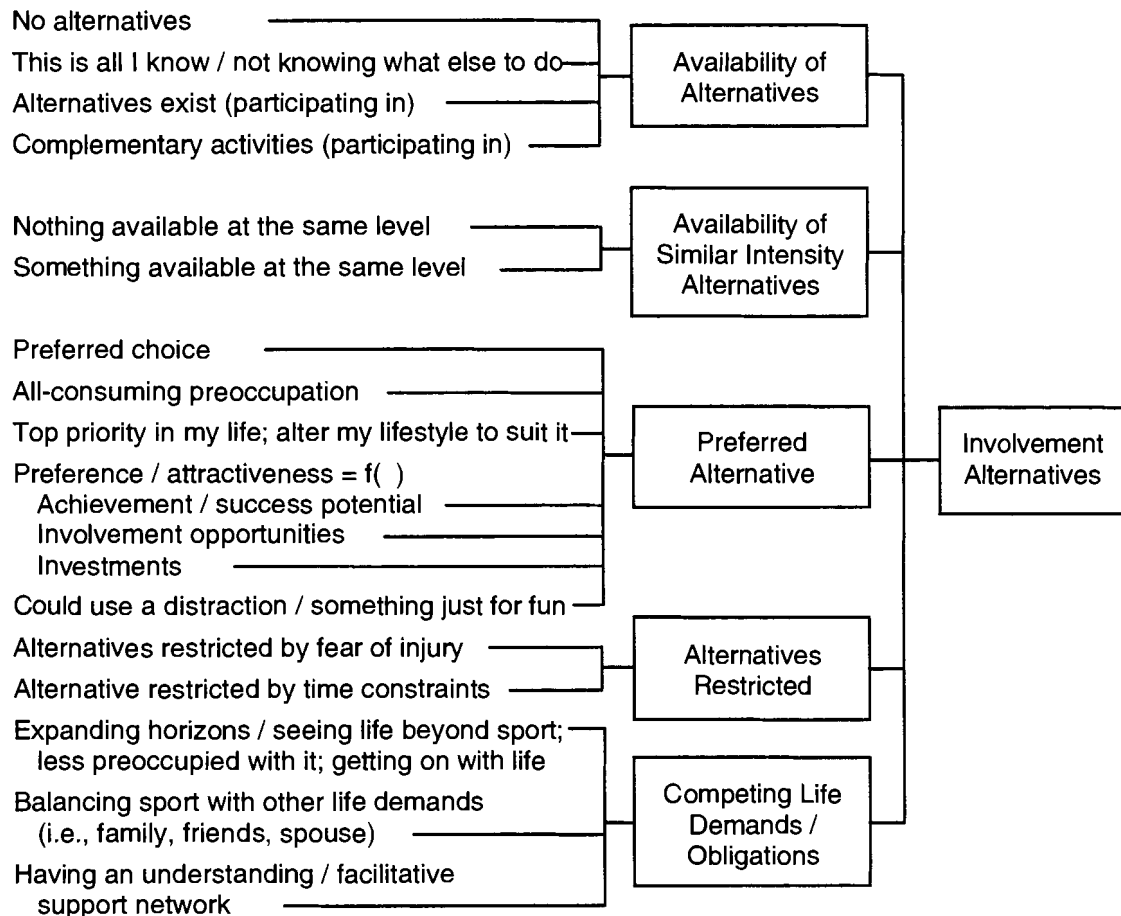
Section 3: Involvement Alternatives

Involvement alternatives refers to the availability, attractiveness, and imminence / urgency of alternatives to sport involvement. It consists of the following five themes: availability of alternatives, availability of similar intensity alternatives, preferred alternatives, restrictions on alternatives, and competing life demands or obligations. The thematic hierarchy for involvement alternatives appears in Figure 6.

Availability of alternatives relates to the actual and perceived availability of alternative activities. It also refers to actual participation in these activities. It consists of four categories. The first category refers to situations where no actual alternatives are available – "I'm just wrestling...and school...I don't really have that much else." The

second category relates to situations where alternatives might exist, but they are not known to the athlete – “I probably wouldn’t know what else to do.” The third category reflects responses where alternatives exist and the respondents

Figure 6. Involvement Alternatives



actually participate in them. This includes other sports like soccer, rugby, skiing, touch football, golf, and tennis. It also includes non-sport activities like spending time with friends and significant others. These alternative activities are independent of a participant’s chosen sport, and they are done for their own sake (i.e., autotelic). The

fourth category reflects situations where athletes engage in alternative activities, but these activities are a complement to their chosen sport (e.g., doing judo to complement wrestling, doing 'track' to complement football).

Availability of similar intensity alternatives refers to an athlete's perceived ability to engage in other activities at a high-performance level. It consists of two themes, reflecting whether these activities were available or not.

Preferred alternative consists of five categories. The first category reflects whether an athlete's current sport is actually their preferred choice - "I can't really think of anything that I would rather do" - "I love basketball too much to want to play another sport." The second category refers to the process of being preoccupied by a given sport - "my days are focused around basketball" - "everything you do just comes back to it (football)" - "when you're not playing football, it's what you're thinking about." The third category reflects how participants make their sport a top priority in life - "If I ever went to a job interview, I'd say...this is my soccer schedule...if I do get a job, it's going to have to go around soccer right now.." - "I monitor other parts of my life to make sure that soccer is not hampered in any way" - "running is first, and school is second...I know the profs wouldn't want to hear this." The fourth category reflects the criteria upon which preferences are based. These include (1) competence / potential for success - "that's what I do best" - "if I wasn't successful at track, I'm not sure I'd still be doing it", (2) involvement opportunities like travel, a professional career, etc., and (3) personal, irretrievable investments like time, money, and effort - "I have committed my life, I mean seventeen years to soccer, so I won't say that there is something I would rather be doing..." The final category reflects the idea that despite engaging in their preferred activities, some athletes also wish they could engage in other activities as a distraction,

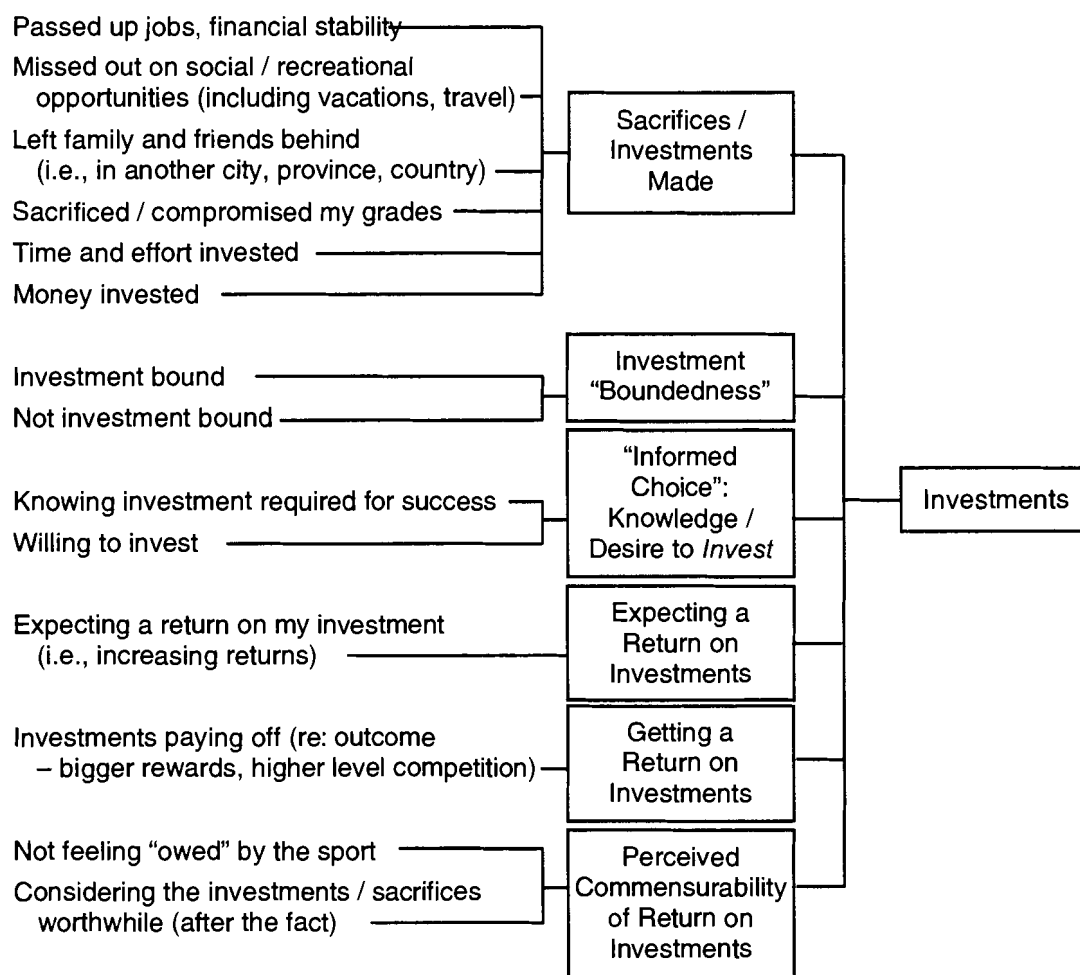
or just for fun –“I’ve just got wrestling and school, and I don’t really have that much else...I would like to have a hobby or something else that I could do that was enjoyable...it doesn’t have to be competitive...just something I enjoy doing.”

Alternatives Restricted refers to barriers to engaging in alternative activities. These barriers include fear of injury (and the possibility of jeopardizing their season, their funding, and their competitive standing) and time constraints (i.e., having no time or energy for other activities).

Competing life demands refers to activities, obligations, and responsibilities that could pose challenges to sport commitment. It consists of three categories. The first category refers to the desire to expand one’s horizons and get on with life. The last two categories refer to (1) the desire to balance one’s life with family, friends, and a partner, and (2) having an enabling social support network that understands your priorities –“you have to organize your life. You can’t say ‘there is soccer’ and forget everything else...and that is tough to take for a lot of people...especially girlfriends and family...if you can keep everyone happy while giving yourself enough time, it is a big factor for your commitment.”

Section 4: Investments

Investments refers to allocations of time, money, and effort that cannot be retrieved after discontinuing an activity. It consists of six themes, whose component categories appear in Figure 7. The themes are (1) sacrifices / investments made, (2) investment ‘boundedness’, (3) ‘informed choice, (4) expecting an investment return, (5) getting a return, and (6) the perceived commensurability of the return.

Figure 7. Investments

Sacrifices / investments made refers to actual sacrifices made in the name of sport. Participants indicate that they made sacrifices in six domains: these are (1) employment / finance (e.g., passing up jobs, being broke), (2) social / recreational (e.g., parties, concerts, vacations, losing touch with friends), (3) leaving family and friends behind (when relocating to attend school and compete in sport), (4) academic performance, (5) time and effort, and (6) money (i.e., the cost of training, competing, and traveling).

Investment "boundedness" refers to an athlete's perceived obligation to participate in their sport by virtue of the investments they have already made. According to Smith (1986) this theme is an important component of entrapment-based commitment. In the current study it is represented by two categories reflecting the presence or absence of the phenomenon – "I've put all this time into it so far, I've worked hard to get to where I am, I'm not just going to...throw it away" - "it's not really what I have done that keeps me going...it's more what I haven't done or what I want to do" – "I don't look at it as 'I've invested so much money in the sport that I'm going to continue. I like playing...because it's fun...if I don't like the sport anymore, I just won't play" – "you can always reach a stage when you've put in all that time and effort and you just don't enjoy it anymore...you don't want to go ahead...that's when you should quit...you should be happy with what you've done."

"Informed choice": Knowledge / desire to invest refers to the decision-making process of investing irretrievable resources into sport. It consists of two categories. The first category reflects an athlete's awareness of the investment required for success - "to get to this point...to be successful, I have to practice a lot" – "if I am going to be good, I can't just go through the motions...I have to really commit myself and have the determination...to do the small things...to wake up early, and do stuff that you don't necessarily want to do at the time" – "to play in Europe...is a big step...changing the place you live, leaving your girlfriend, family, and everyone behind, and basically going over there and using any money that you have...that's the next step but I am not sure if I am there yet. That's something that I have to consider." The second category reflects an athlete's desire to make that investment - "I'm willing to keep doing the things I've

done to be successful to carry on being successful “- “you’ve got to do whatever it takes...to get up to the next level.”

Expecting a return on investments reflects an athlete’s belief that their continued effort and involvement will lead to desirable outcomes. Also included is the expectation that these returns will increase over time – “if you are willing to make that much of a commitment...then no matter what level you reach you’re gonna be rewarded in some way, shape, or form “ – “whatever amount that you put into it, you’re gonna get out.”

Achieving a return on investments refers to the actual occurrence of the expected [desirable] outcomes. In this case respondents reported bigger payoffs and rewards, like being able to participate in progressively higher levels of competition – “since I’ve realized that I could have a future in basketball...my commitment has shot up“ – “each success I have achieved has been like a step...and each time I get somewhere...I can see another goal...each one I put out so much work...and the rewards are getting bigger” – “there’s the satisfaction of knowing you’ve actually completed something, you’ve worked all this time and now it pays dividends.”

Perceived commensurability refers to an athlete’s satisfaction with the return on their investments. At an intuitive level this would seem to be an important factor, as it would likely play a role in decisions to invest in the future. Perceived commensurability consists of two categories. The first refers to the feeling of being “owed” by one’s sport. This reflects an athlete’s perception of whether their investments were sufficiently rewarded –“it’s not like I...didn’t get anything in return...there’s still more that I want to achieve, but I’ve achieved enough.” The second category refers to a global, post-hoc judgment by an athlete on whether their investments are worthwhile. It reflects the situation where, despite receiving limited returns on investments so far, athletes

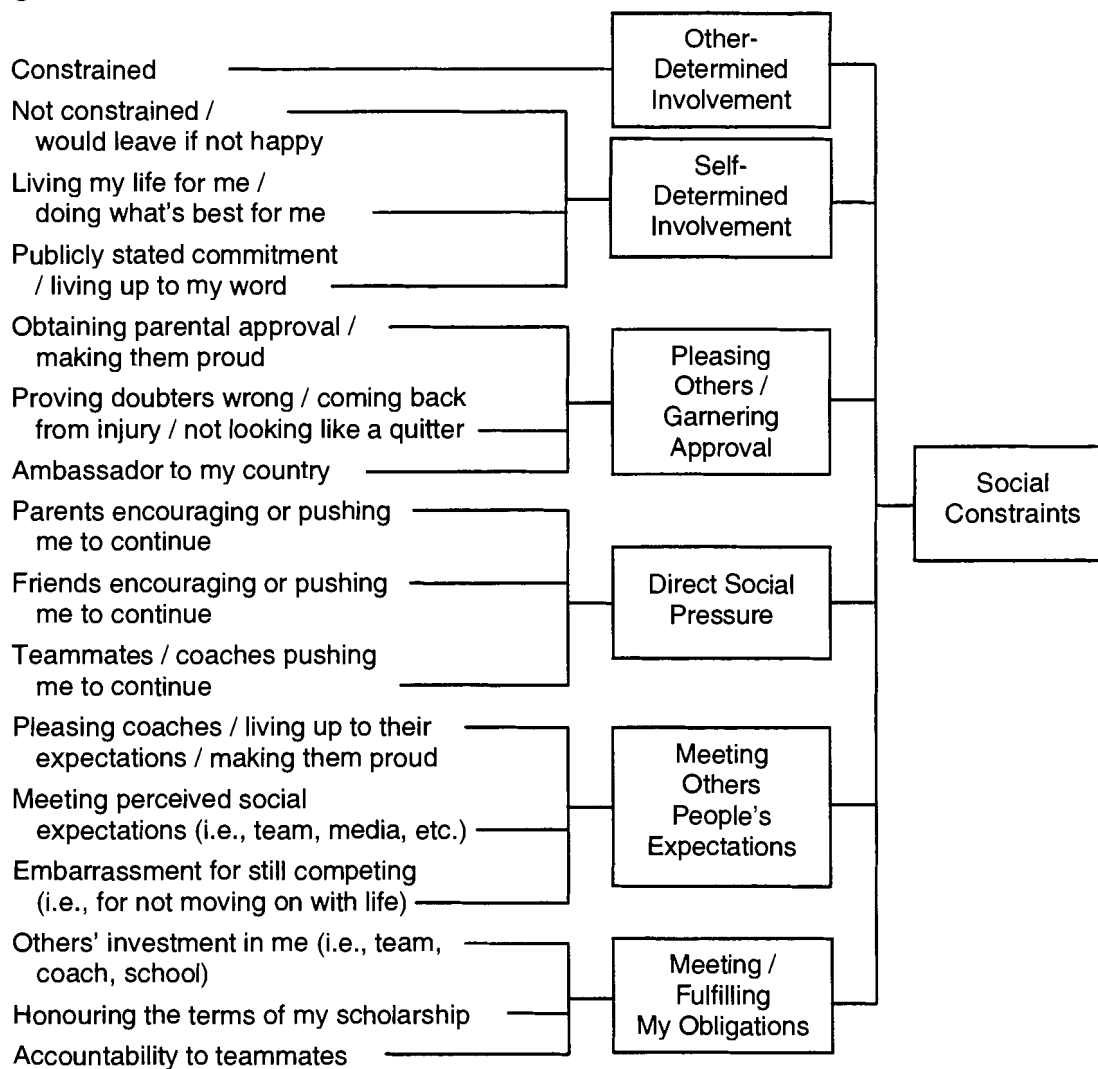
determine that their sport involvement is worthwhile in the long run –“everything I put into it led to something worthwhile...being able to play at the international level was one of my goals and that was reached...so if I could never play again I could say it was all worthwhile.”

Section 5: Social Constraints

Social constraints refers to social influences that deter or inhibit an athlete from terminating their sport involvement. It consists of the following six themes: other-determined involvement, self-determined involvement, pleasing others / garnering approval, direct social pressure, meeting other people’s expectations, and meeting / fulfilling my obligations. The thematic hierarchy for social constraints appears in Figure 8.

Other-determined involvement reflects an athlete’s perception of having little input into their continued sport involvement. In this regard participants reported that other people decided if they stayed or left their given sport – “you don’t want to think of yourself as someone that is...not free to do what you want...I got hurt, a stress fracture and the doctor said I couldn’t wrestle for three months, so that would mean I was done my season...and it was sort of relieving because it sort of lets you quit without it being your decision“ – “when you’re playing for Simon Fraser [University], you have to be there...you have to play every day almost, and go on two road trips a week...I had to be there for the scholarship.”

Figure 8. Social Constraints



Self-determined involvement refers to the perception that continued sport involvement is under one's own control. It consists of three categories. They are (1) not constrained, (2) living my own life / doing what's best for me, and (3) living up to my word. This latter category refers to an athlete's desire to fulfill a publicly stated commitment. While this category reflects some degree of restraint or obligation, respondents were clear in their conviction that these obligations are self-imposed –

“once I started wrestling I went because it was the right thing to do...it was more of a moral decision...I made a commitment at the start of the year and I had a duty to follow up on that.”

Pleasing others / garnering approval reflects the situation where an athlete's continued sport involvement is in part determined by the desire for social approval. It is also related to a desire to avoid social disapproval by quitting. Pleasing others consists of four categories. The first category reflects a desire to please parents and to make them proud – “[I feel] obliged to play for my parents...it's a sense of pride they get by saying 'my son plays football'...it's always nice because you like to hear your parents speak highly of you.” The second category reflects a desire to prove doubters and critics wrong. Associated with this theme is the desire to avoid looking like a quitter (e.g., coming back from injury despite people's beliefs to the contrary) - “when I'm injured and I am sitting on the sidelines...and people make cracks...people who say 'injured again, eh'...other competitors...I think to myself...wait till I come back, and I'm gonna kick your ass” – “you don't want to look like a quitter...I always want to prove people wrong...overcoming, pushing myself...everybody said I couldn't even make the level below where I [eventually] ended up .” The final category reflects a desire to remain in sport (in part) out of national pride – “sometimes I feel like I'm an ambassador for my country...I want to show them that Swedes...can do well here...I'm playing on a Canadian team in an American league...so, people...they'll know me as 'the Swede'...and so it's a commitment to my country, in that way.”

Direct social pressure refers to overt attempts by others to persuade athletes to continue their sport involvement. Participants indicate that these pressures come from their parents, friends, team-mates, and coaches.

Meeting other people's expectations is a similar concept, albeit more covert than direct social pressure. This category reflects an athlete's internalizations of the expectations of those around them. It consists of (1) wanting to please coaches and make them proud, and (2) meeting social expectations (i.e., from team-mates, coaches, and peers). One athlete reports a seemingly opposite theme, reflecting a sense of embarrassment from continued sport involvement and for not getting on with life - "my parents are [saying] 'you should quit, you should quit'...when I go back to town...to my home...my past friends would always be asking about it [wrestling]...so it would be nice just to say 'I completed it, I'm done'."

Living up to my obligations refers to a sense of duty to honour explicitly or implicitly stated agreements. It consists of three categories. The first category refers to honouring other people's investment in me. These investments refer to the time, money, and effort expended by the athlete's team, coaches, and parents - "I know that if I quit wrestling there would be people that would feel cheated...like my coach says that I have been wrestling only ten matches (i.e., due to injury or being eliminated in tournaments) and I have had all my scholarships...those are the people that I really do not want to let down" - "the wrestling association has funded us for so long, you feel like you've got to keep going, or at least help out in some way." The second category refers to a desire to honour the terms of one's scholarship. The third category refers to a sense of accountability to one's team-mates - "I wouldn't want to let my team down. If I have to be there, I'll be there...not only do I want to perform, but I want the guys on my team to know that I'm going to be there...and be there for them as well, so they can perform" - "you'd let other people down on the team if you quit, just because the team won't do as good, maybe" - "if you quit you're out of the fold, you're out of the community, you're

shut out...there are people that quit that still kind of hang around, but...people look down at them.”

Section 6: Involvement Opportunities

Involvement opportunities refers to valued experiences, rewards, or outcomes contingent on continued sport involvement. It is important to note that many of its component themes and categories resemble those related to sport enjoyment. The difference, however, is that involvement opportunities reflects an athlete's *expectation* of valued experiences, while sport enjoyment reflects an athlete's *response* to these experiences. In this regard involvement opportunities reflects the conscious, calculated, decision-making aspect of sport commitment. The thematic hierarchy for involvement opportunities appears in Appendix D4.

Involvement opportunities consists of four themes, reflecting anticipated psychological, physical, tangible, and social benefits of sport participation.

Psychological / experiential benefits consists of three categories. They are (1) fun / autotelic activity, (2) the thrill / experience of competing, and (3) the opportunity for unique experiences.

Fun / autotelic activity in turn consists of two categories: doing something I love, and having fun / being playful. The thrill of competing consists of six categories. They are (1) winning / scoring / executing moves, (2) feeling the thrill / rush of competition, (3) experiencing the drama and glory of competition, and, (4) performing / being in front of a crowd, and (5) the sheer joy of being competitive - “competing against other guys...the challenge of it ,” and (6) the attractiveness of playing at a high level.

The opportunity for unique events refers to an athlete's ability to attend large scale events like the Olympics. It also reflects their desire to have no regrets and to avoid missing out on unique opportunities (e.g., to play professionally, to reach the Olympics, to win a championship, or to actualize one's potential).

Physical benefits refers to anticipated fitness and health-related outcomes. It consists of three categories that refer to the opportunity to (1) train, (2) be in shape, and (3) engage in intense, strenuous activity.

Tangible benefits of involvement refers to the anticipation of specific, concrete 'side' benefits to continued sport involvement. It consists of three categories related to career opportunities, lifestyle benefits, and perks.

Career opportunities include (1) getting a university degree or scholarship, (2) establishing a professional sports career – “and now I'm realizing that I'm going to sign with an agent...and an agent is going to look for a job for me, which I could live a nice life off of...there are [basketball] leagues growing everywhere in the world, so there's tons of places to play (3) getting paid to do something I love, (4) networking / job contacts, and (5) career spinoffs (e.g., coaching, public speaking).

Lifestyle benefits include (1) having a structured routine, (2) leading an active, healthy, and longer life, and (3) having a physically and mentally challenging lifestyle. Perks consists of three categories: going on trips with team-mates, earning travel points / getting free trips, and enjoying special privileges (e.g., getting my laundry done, having the use of a car).

Social benefits of involvement refers to anticipated and desirable social experiences. It consists of seven categories. They are (1) being with friends / team-mates and coaches, (2) being part of a team, (3) having a shared passion (i.e., with

team-mates), (4) meeting people with similar interests, (5) being special / high profile, (6) meeting people while traveling, and (7) and socializing with team-mates.

No benefits reflects the case where sport commitment is not influenced by enjoyment-based sources. Under these circumstances an athlete's commitment is entrapment-based and determined by limited alternatives, heavy (unrewarded) investments, and social constraints. It is represented by the single theme of 'wouldn't miss much'.

Summary of Sections 2 Through 6

The results presented so far serve to replicate and extend the existing constructs of the sport commitment model. This is particularly the case with the latter four constructs, since they have yet to be studied using qualitative methodology. The current study, however, gives rise to three superordinate constructs believed to further explicate the nature of sport commitment. These constructs are transcendence / teleology, transformation, and adaptive functioning. They are described in detail in the next three sections.

Section 7: Transcendence / Teleology

Transcendence / teleology refers to the goal-directed nature of sport participation. This goal-directedness is agentic, cognitive, self-generated, and in the service of a global purpose or meaning. Transcendence / teleology reflects the manner in which athletes are *impelled* to compete by internally-generated drives, instead of

being *propelled* by external forces like modeling or social expectations. The thematic hierarchy for transcendence / teleology appears in Appendix D5.

Transcendence / teleology consists of three themes. They are (1) having defined goals / dreams, (2) having a meaning / purpose, and (3) self-actualization.

Having defined goals / dreams consists of three categories: outcome goals, maintaining my standing, and mastery goals.

Outcome goals refers to specific, desired outcomes defined largely through competition and / or social comparison. These include (1) wanting to compete at the highest level of my sport (e.g., national and international competition, the Olympics, professional leagues), (2) a desire to be the best, win, or place - "I wouldn't want to be in the NBA and sit on the bench and be the twelfth man on the team...I'd want to move up through the rotation and be a starter" - "everyone wants to be the best on the field...you want to be better than the other guy," (3) wanting to finish my career on a 'high' - "I wanted to get one last shot...place higher than I ever had before...to go through a full season...and give it my all...I had to finish my career for myself in that way," and (4) wanting closure / to finish what I started - "it's hard to let go without feeling that you're somebody who'd just never quite made it to their dream...it makes it that much harder...to let go and not think that 'well, maybe if I'd just'..." - "I've put in so much so far, I might as well see it through...to do it and get it over with...that would top everything off."

Maintaining my standing reflects a desire to maintain one's current level of competitive standing. This category arises from participants competing at or near the highest levels of their sport, and it reflects their desire to stay there - "once you hit the top, you know, it just feels good and you want to ride that wave for a little while" - "if I

slack off there's someone that wants to take my spot...it's not like a free ride...I'm constantly battling these fears."

Mastery goals refers to desired outcomes that are largely self-referenced. It consists of two categories, reflecting a desire to master a given sport. The first category refers to the desire to have cascading / incremental mastery goals. This theme reflects the desire to reach higher and higher levels of skill proficiency – "I want to be good, and so I am thinking of ways to gain an advantage on my opponents...and if I am making a conscious effort to work on the things that I am weak at...I can get to where I want to go." The second category reflects a more global desire, that is, to be as proficient as one can be. In this regard it is similar to self-actualization, but restricted to a specific sport context – "I just want to reach my full potential (as a wrestler)" - "I'm not fully developed as far as skills go...I want to get to that point (as a basketball player)" – "I have a desire to be the best [soccer] player that I possibly can be...quitting wouldn't be an option...I would always have that sense of never knowing whether I could have made it or not."

Having a meaning / purpose refers to a global desire to orient one's life in a specific direction. In this regard it is truly teleological, as it defines the purpose and or meaning of a person's life, and it serves to govern the direction of their behaviour. It consists of three categories. They are (1) having a direction / purpose (2) allegiance to a cause or principle, and (3) apotheosis / immortality strivings.

Having a direction / purpose reflects a general desire to have a locus of direction, regardless of what it may be. In this regard respondents can direct their energies and organize their time – "it gives me structure" – "you set a goal, and everything you do is with that aim in mind."

Allegiance to a cause / principle has a transpersonal component as it reflects a desire to become aligned with an entity larger than oneself. It consists of three categories: pursuing a higher sense of happiness, being part of a winning tradition / something larger than myself, and devotion to a team or cause.

Pursuing a higher sense of happiness refers to a desire to transcend immediate sensory pleasure or comforts in the interest of something enduring, fulfilling, and personally meaningful. In this regard it has an almost spiritual quality – “not always immediate gratification, but its looking for enjoyment later on...looking for ultimate enjoyment...for a greater happiness” – “an enjoyment that goes beyond physical pleasure.”

Being part of a winning tradition / something larger than myself reflects a desire to align oneself with an established organization or group of people. Generally it refers to being part of a team with a lengthy winning tradition – “[my school] has a lot of success, you know...I’d like to make my mark...I like the fact that you are part of something larger than just yourself...it’s like when you put on a [Montreal] Canadiens jersey...there are lots of people before you that had success, and you feel you want to be part of that tradition.”

Devotion to a team / organization refers to an athlete’s commitment to the ideals and / or success of their chosen team – “I feel better the more I contribute to my team...I don’t want to let down the team” – “when you play football...I feel like I’m doing something for the university...[and not] just another number like other students on campus.”

Apotheosis / immortality strivings refers to an athlete’s desire to leave their mark in their chosen sport. It also reflects the desire to be remembered in the sporting

community and to live on in its folklore – “if you place, you’re part of history...you get your name on the board” – “everyone wants to be a hero, and everyone wants to be remembered...you want ten years from now to have people talking about you.”

Self actualization is consistent with the humanistic-existential principle of personal growth and the realization of human potential. It consists of three categories: growth / achievement orientation, inspiration from role models, and inspiration from achieving success.

Growth / achievement orientation reflects a general desire to set goals, to strive to meet them, to achieve, and to learn. Respondents indicate, however, that this desire transcends their involvement in sport. They report that sport is a vehicle for this general desire and that when they retire from sport, they will achieve in some other domain. Growth / achievement orientation consists of three categories. They are (1) having and pursuing goals per se – “I...like to try something new and challenge myself...just challenging yourself and seeing where you stand” – “I like to accept challenges...I thrive on facing challenges...it’s just part of my competitiveness,” (2) having cascading, never-ending goals per se, and (3) pushing my limits and meeting my physical potential.

Inspiration from role models is analogous to the modeling component of Bandura’s (1990) model of self-efficacy. In this regard respondents describe how their role models inspire them to improve and to transcend themselves – “the other day we were watching a guy on our team from last year...he’s playing in the CFL right now...and there’s three or four of us watching him play on TV...and he was someone who always worked really hard in everything he did...and it just makes you realize where you can go if you work hard at it” – “I see other guys who have had success and I know that I can be one of those guys...so that motivates me.” Participants also report being inspired by the

motivational climate provided by their team-mates – “when you are on a national team you are with a group of people that you know are as dedicated as you are... they propel you to do better“ – “we bring each other up to a higher level” – “it’s a good atmosphere...kind of feel like winners, you’re doing the best that you can be, you know everyone’s trying to be the best they can be.”

Achieving success is analogous to the efficacy experiences component of Bandura’s (1991) model of self-efficacy. In this regard it refers to the inspirational power of previous success on future success. Achieving success consists of two categories. The first category refers to the desire to build on previous success (re: outcome, wins) – “it is a matter of giving yourself a pat on the back and saying ‘good job’...but what am I going to do now? “ – “I had success when I was young...that was encouraging...I wanted more success and more success” – “whenever you see improvement...you become a little more committed because...you know you can do it again” – “the taste of success that I had has increased my commitment...it increases your commitment to improve yourself that much more.” The second category refers to the desire to continue setting and meeting goals, and to continue achieving in and of itself (i.e., in competitive and mastery domains) – “it’s goal setting and achieving goals that keeps some people going...especially during tough times” – “anytime you reach a goal that you set for yourself...it increases your enjoyment...especially when it’s a major goal that you do for...months, every day...it’s gonna obviously affect your enjoyment of the game” – “you need goals to succeed...if you get your goals...nothing can make you happier...you feel like you’ve accomplished something.”

Section 8: Transformation

Transformation refers to the effect of sport involvement on an athlete's identity, personality, or character. It relates to the formative effect of sport personality, as reflected in quotes like "sport made me what I am," "without sport I'd probably be in jail." Its relationship to commitment is implied in statements like "I'm a runner. That's who I am, and that's what I do." The thematic hierarchy for Transformation appears in Appendix D6.

Transformation consists of four themes: identity forming, character building, leadership achievement qualities, and growth / complexity orientation.

Identity forming consists of six categories. They are (1) self-defining / image building, (2) high self-esteem, (3) confidence building, (4) being influenced by role models and mentors, (5) internal locus of control / agency, and (6) group membership / citizenship.

Self-defining / image building consists of four categories. The first is related to the process of defining one's self – "I can't even imagine where I'd be or who I'd be if I hadn't played soccer...it's such a big part of my life...it's how I define myself...it's such a big part of me." The second category relates to the process of identifying with a team – "I'm part of this team and I'm proud" – "when you're a senior it's your last year...you're kind of like 'it's MY team'...and that's when you become...almost like a teacher...you take them aside [team-mates]...and tell them 'this isn't the thing to do'." The third category refers to the process of identifying with a gender stereotype and to a sport-specific image – "because wrestling has, you know...a real sort of he-man image" – "football has that sort of 'clash of the titans' kind of feel." The fourth category reflects the

development of a sport-specific lifestyle – “when you’re playing...it just turns into your way of life...everything you do comes back to it...like the guys you hang around with are all guys from the team” – “I was in grade two when I started...ever since, it’s just something that I never stopped doing...I never even thought about stopping” – “I’ve just been doing it since I was about eight years old...I’ve just never really thought about why...every year I just went back to doing it.”

High self-esteem refers to feelings of pride resulting from various aspects of a sporting life. These feelings arise from (1) overcoming challenges and being successful, (2) working hard and performing to my potential, (3) being in shape and looking good / looking healthy, and (4) feeling superior and special – “I’ll look at other guys and say ‘there’s no way you could diet and do all this stuff to make weight...so you can take pride in that’ – “it’s a feeling that you have reached a certain physical and mental level that most people never will...it gives you a feeling that you are not a regular person ...you’re engaged in a worthy pursuit” – “I’ve made the national team...so I guess I do feel a little, a bit special” – “you drive by a park and there’s a bunch of guys throwing a football around...you look at them and...you know...they’re not at the calibre you are...it makes you feel good that you’re at the level you are...it makes you feel good about yourself...and what you’re doing” – “I can do stuff that other people can’t do” – “I feel special that I actually represent the school for something” – “I’m lucky that I have this gift that I love to run and that I’m able to compete at a high level...and I think that’s something that a lot of people would really, you know, want to have” – “coming second at Nationals...of all those people in the country, I’m second...it strikes you as being...I really am somebody.”

Self-efficacy / confidence building is defined in a manner consistent with previous theory and research (Bandura, 1990). It consists of two categories. The first category reflects how sport leads to a sense of well-being from being competent at something, regardless of one's abilities in other life domains. Also included in this category is the idea that 'it's what I do best; I'd be scared to leave it'. This relates directly to Bandura's concept of self-efficacy as it is related to self-referent beliefs about task-specific abilities. The second category refers to expectations of a more global nature, as reflected in the concept of confidence. In this regard respondents describe how their sport involvement gives them a global sense of competence, transferable to a variety of life domains – "after things I've experienced through wrestling, there's not too many things that I'd be intimidated by, or feel that I couldn't handle" – "as you grow in the sport...you learn to...accomplish more things...you feel like you can apply that to any aspect of life" – "it's helped me become a more confident person...I've always been confident in soccer...but I wouldn't say that I've always been confident in some of the other areas of my life...but now I'm confident in almost everything I do."

Influence from role models and mentors consists of three categories. They all refer to the formative influence of people in and around the sporting environment. The first category refers to the experience of being influenced by one's coach – "[my] coach did influence me in certain ways...positive, I'd say...discipline, and also having someone to talk to you and to help you somehow make sense of the world" – "when I was fourteen or fifteen I wanted to do everything the coach said...he was a German coach...who played professional." The second category reflects the process of emulating one's role models or peers – "if you hang around with the top wrestlers in the world, you won't become shitty...it's good to be with them" – "one of our coaches, one of his things was

not to drink carbonated drinks...so I went for an entire year without drinking pop.” The third category refers to parental influence – “my dad always pushed me to give one-hundred per cent...I watched him play sports, and he has been a big influence...I watched him play hockey and I can tell that he was one of the hardest workers on the team...and he tried to put that in me when I was young.”

Internal locus of control / agency is related to participant beliefs on how sport affects their ability to manage and direct their lives. It consists of two categories. In the first category, participants indicate that sport helps them develop a sense of autonomy and control over their lives – “you’re in control of...your scheduling...the practicing, the coach runs it for you...but there’s no one on your back and you do have a lot of freedom.” The second category reflects participant beliefs that sport affects their general attributional styles. Specifically, it refers to their general tendency to make internal attributions for the outcomes of their efforts, based largely on factors like preparation and effort – “you look back at the training...as the main cause for that success you had in competition” – “the more you work...the more I’m in the gym...the more I feel...’well I should be this good because I’ve worked on it for so long...why I should be able to do it; and that’s the kind of confidence that comes out of you when you start to play like you want to play.”

Group membership / citizenship has a long heritage in the mainstream literature on identity structure and identity formation (see Paranjpe, 1998). In this regard an individual’s self-concept is reported to be strongly affected by their affiliation to formal or informal social groups. In the current study this consists of two categories. The first category refers to a sense of acceptance, belonging, and membership in a given sport community – “even though you’re not the best player on the team, you’re accepted...just

because you're on the team" – "there's a big alumni...so even when you're done [playing], you always stay part of it." The second theme refers to a sense of patriotism or pride from representing one's country or school in athletic competition – "when we go on trips that are international...you walk proud because you're from Canada" – "when I knew I was playing for my country...I just wanted to have one of the best games in my life...I guess everyone gets the feeling when they put the jersey on...it's such a big honour."

Character building relates to the age-old belief that sport builds character. The current study adopted the William James definition, depicting character as a collection of personality traits endowed with socially-constructed, consensually-derived value. While the belief that sport builds character is not new, systematic research in the area has only recently begun (see Hanin, 2000).

In the current study, character building consists of two categories. These are (1) developing prosocial attitudes and values, and (2) developing healthy, prosocial living habits.

Developing prosocial attitudes and values consists of five categories. The first two categories are (1) showing respect for opponents, less skilled athletes, and the general public, (2) being exposed to prosocial influences – "I think it's healthy being around...the kind of people you see yourself as...I like to see these guys because they work hard, they want to achieve, and they keep things in perspective" – "the people I associated with in wrestling have been positive people...I hope that has rubbed off on me" – "the people that I've met...they've been clean people...the level of people is higher...the people that I've hung around with have just been great people." The third category refers to learning the virtue of humility. In this category participants describe

how sport involvement teaches them to be humble, to respect superiors and subordinates, and to place their own achievements in a realistic perspective – “there’s always somebody out there who is better” – “the injury made me look back and say ‘Whoa, you know, you’re not invincible, and you’re not God’s gift to running...and you really are going to have to work your ass off to do well,’” The fourth category refers to learning the value of friendship – “I’ve learned how lucky I am to have a good bunch of friends...and if I didn’t have them, what would I be?” The last category involves learning to value health and fitness.

Developing healthy, prosocial living habits consists of three themes. They are (1) leading a healthy and active lifestyle (2) being in shape, living healthy, and feeling vital, and (3) staying out of trouble. The latter theme depicts sport involvement as a protective factor against criminal or antisocial activity. Respondents indicate that this is accomplished partly through the development of prosocial attitudes and values, and from the fact that sport is time-consuming - thereby limiting their opportunities for bad behaviour – “in school we had a lot of kids, that if they wouldn’t have gotten involved in wrestling, they would have been in trouble...what wrestling did was show them that they could belong to something and feel good about what they did “ – “you don’t want to get into trouble...you don’t want to screw yourself over...I was never into drugs, drinking...where everybody else is doing it, and you’re not...because you don’t want to screw up your body” – “I’ve never really been in trouble since I’ve been playing football because you are just too exhausted when you finish...you just don’t want to look for trouble...and, you are allowed to be as aggressive as you want, because it is part of the game...and you get off the field and you just become a normal person again.”

Leadership / achievement skills refers to the belief that sport involvement enables athletes to develop abilities, skills, and personal qualities transferable to other achievement contexts. These attributes are differentiated into two categories: technical / organizational skills, and emotional intelligence.

Technical / organizational skills consists of two categories. The first category refers to a number of achievement-related skills like time management, priority setting, personal efficiency, and problem solving – “I use the same tools to psychologically prepare for a wrestling match...for other things...it’s a way to prepare for challenges” – “[sport] has taught me over the years...to manage time” – “it makes your life more enjoyable when you’ve got a bit of structure to it...you’re not always worrying about getting stuff done.” The second category refers to how sport teaches athletes to be resourceful and to ask for help – “knowing that you can’t always do things on your own...I think it has helped me learn a lot about myself...it’s good .”

Emotional intelligence is consistent with the construct described by Goleman (1995, 1998). In the current sample it consists of four categories. They are motivational skills, social skill / management qualities, self-awareness, and empathic understanding.

Motivational skills consists of nine categories. They include (1) having high expectations of myself, (2) goal-setting, initiative (3) work ethic – “I think wrestling has helped me...develop my belief in working hard...life is short and if you are going to do something, you should take your task seriously” – “I see the benefits of hard work...and shortcuts don’t really cut it” – “I’ve learned what hard work is all about. I can remember...we’d run and run and run and run...I’d be puking, yet I’d still be expected to get back up again and keep running...I think I learned what hard work was all about right there,” (4) commitment, reliability, and responsibility – “learning that if I say I’m going to

be there, I'll be there," (5) discipline / dedication, (6) high expectations of others, (7) competitiveness, (8) a general desire to excel, and (9) courage to face challenges and difficult tasks.

Social skills / management qualities refers to the development of leadership / managerial abilities useful in the pursuit of individual or collective goals. It consists of four categories. They are (1) becoming a leader / mentor to other players, (2) learning about teamwork, co-operation, and interpersonal effectiveness, (3) developing communication skills like active listening, receiving feedback, and accepting criticism, and (4) developing social skills / becoming socially facile – "I used to be quiet and never used to talk to anybody...I think it brought me out a little bit" – "life skills, interpersonal skills...things that are gonna help you survive once you are out of the game of soccer...things that you learn there."

Self-Awareness refers to the process of developing personal insight through sport. It relates to issues like coping style, hardiness, courage, and personal vulnerability – "sports helps you deal with your fears...and it makes you more aware of what you are as a person because you are constantly dealing with your fears...and you're being forced to deal with people like yourself" – "when I have bad experiences and I'm forced to evaluate my running...I'm really evaluating my life...I'm forced to look at myself, like look deep into myself...and that's a very hard thing to do...it's hard to say 'I made a mistake' or 'maybe I'm not as strong as I thought I was'."

Empathy reflects the process where athletes learn to understand, 'read', and relate to those around them. In so doing, empathy seems to facilitate other achievement-related processes like co-operation and teamwork – "I have to adjust my personality depending on the level of players that I'm around...[for example], at the most

elite level...when someone screws up, you kinda poke fun at them, just because you've seen them do it properly...at my club team, which is another notch down...if someone screws up...I can't poke fun because...this person might not be capable of doing it right...I find that I'm good at reading people...so I can relate to them...I can say something to make them feel comfortable, make them laugh...and I think I've gotten that from soccer...being involved in so many different levels."

Growth / complexity is consistent with the construct described by Csikszentmihalyi (1996). In his work on creativity, Csikszentmihalyi described a general tendency for all living things to grow, to differentiate, and to become more complex. This is consistent with Carl Rogers' construct of the organismic enhancement motive (1951). In any event, Csikszentmihalyi proposed that complexity is a function of several interrelated factors, three of which appear in the current study. They include (1) maturity / immaturity balance, (2) a positive / sophisticated worldview, and (3) hardiness / resilience / discipline.

Maturity / immaturity balance consists of two categories: Becoming mature, and remaining childish. Becoming mature refers to the ability to face challenges, to endure disappointments, and to persevere – "I've learnt to deal with a lot of things that I don't think people would deal with (this young)...like a lot of upsets...like tripping and falling in an international race...and I think it's good it's happening now, so I can deal with it and move on...and then the next time it happens, you just say 'whatever', and life goes on." Concurrently, some respondents describe immaturity / childishness as the ability to approach challenges from a naïve perspective and to be open to novelty, stimulation, and fun – "it allows us to maintain our childish idiosyncrasies...a lot of athletes are just big kids in a way...I like the physical part, the fun, the playfulness."

Maintaining a positive / sophisticated worldview refers to the propensity for optimism and to the ability to view challenges, problems, and achievements in perspective. In this latter regard it refers to a respondent's ability to see the 'big picture'. This consists of four sub-categories, including (1) the ability to have fun and enjoy life – "it's just made my life better" – "it's enhanced my enjoyment...and it spreads into all areas (of my life)," (2) the ability to appreciate 'the little things' in life by facing setbacks, challenges, and adversities – "you appreciate the little things more. If you cut weight a lot, you really do learn to appreciate a glass of water...not only how it tastes, but what it can do for your body. You really start to appreciate food and start to see the need for eating...to live, not just for taste," (3) the ability to keep things in perspective and to differentiate between the important, the trivial, and the mundane – "it rubs off on your personality and your outlook on life...when things work out for you, you start to get a positive image of life...I'm at the point now where I can turn a negative into a positive...I think it's in that positive attitude that soccer's affected me the most" – "I learned about how we deal with things, and to take it easy – to know what's important...it's a good value I've learned from it [sport]," and (4) the development of a sense of worldliness. In this regard respondents describe how sport involvement enables them to view the world from a variety of contexts, be they national, cultural, and / or socioeconomic. Through these experiences they acquire the ability to recognize the relativity of their own lives, and to set their values and priorities from a broader perspective – "I went to Cuba and brought extra clothes to give away, and it was nice. You know, it might be an old shirt I wore twenty years ago but to this kid, it was like a pair of brand new Air Jordans to the kids here. But this pisses me off as the kids here do not know what they have. Throw them into those environments and they will not last a day. I am grateful for what I have."

Hardiness / resilience / discipline refers to the ability to withstand duress and to persevere in the face of difficulty. It consists of three categories. The first category is mental toughness. It refers to the development of increased tolerance for hardship and adversity. Participants reported how sport emboldens them to face failure (i.e., through losing), but also to face physical pain, discomfort, and injury – “I’m willing to cut weight despite the fact that I love food and I’m a glutton” – “it takes a tough person to stick around when they are getting their ass kicked all the time” – “I can put up with a lot more crap now, just by coming here” – “when I go do things, I think...it’s not nearly as tough as wrestling or making weight...I guess it made me a little more tough mentally...because I feel like I can do more than the average person” – “it’s definitely made me a stronger person...just going through it [injury]” – “I did get beaten by a little upstart, and I was defending champion...and it was very hard to shake her hand...I’m glad I did, and I think that’s a good lesson...it isn’t always going to go your way.”

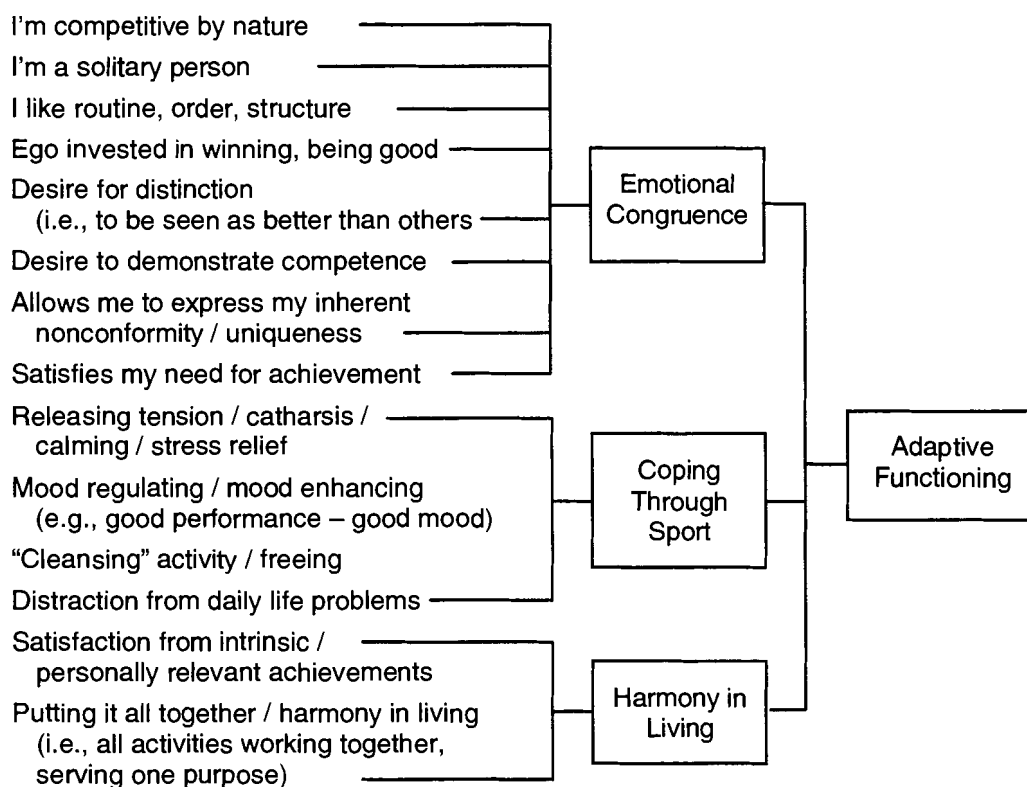
The second category refers to the capacity for self-control and delay of gratification. Participants describe how sport involvement trains them to inhibit momentary impulses and to avoid indulgences in the service of long-term, personally desirable objectives.

The third category refers to stress and coping. Respondents describe how sport involvement enhances their ability to tolerate stressful events, be they acute or chronic – “when you’re faced with races and you get really nervous...you just have to calm yourself down. So if you’re faced with any other kind of problem in life, you know how to calm yourself down...that’s how running has helped me...just dealing with stress...you work well under pressure.”

Section 9: Adaptive Functioning

This construct refers to the role of sport in an athlete's overall adaptation to life. It is an idiographic construct inasmuch as it focuses on the unique and individual function that sport serves in a given athlete's life. The thematic hierarchy for adaptive functioning appears in Figure 9.

Figure 9. Adaptive Functioning



Adaptive functioning consists of three themes: emotional congruence, coping through sport, and harmony in living.

Emotional congruence refers to the functional significance and / or emotional payoffs engendered from sport involvement. It is consistent with the construct described

by Finkelhor (1984) in his research with sex offenders. In this regard, emotional congruence refers to the manner in which a given activity satisfies idiosyncratic personal and emotional needs.

In the current study, emotional congruence consists of eight categories. Each of them reflects an athlete's specific desire, need, or preference that is satisfied by their chosen sport. They include (1) being competitive by nature – "I consider myself to be a pretty competitive person...I'm sure if I didn't play soccer, it would come out in other ways...I seem to have this need to compete...I love to do it", (2) being "solitary" / alone – "I'm a solitary person...I do a lot of long runs...I like...the fact that...you are running by yourself," (3) wanting structure / order / routine – "having a schedule...I'm the type of person who likes routine...it orders my life," (4) wanting to be good, to win (i.e., ego-invested in winning) – "I totally take it personally...winning is...a huge part of it" – "when you lose you feel horrible inside...you feel gutless, and a failure," (5) wanting distinction / to be seen as better than others – "I'm used to...being above most people at something, so...you need it now, I guess," (6) wanting to demonstrate competence – "my need for competition, kinda is based on my need to feel competent," (7) a desire to be unique / nonconforming – "I have always been a nonconformist, and I display that through sport...by doing something so different...that was somewhat fulfilling," and (8) wanting to achieve – "I've got a...need for achievement...if you don't have that you just sort of feel like a bum...you're not doing anything".

Coping through sport reflects the manner in which sport enables respondents to cope with distressing events and daily life stressors. It consists of four categories. The first category reflects how sport helps to reduce tension. Participants describe how sport is a calming influence in their life and how it serves a cathartic function – "if I am having

a bad day I can look forward to getting on the mat and kicking someone's ass...I am really relaxed after a hard practice" – "when I'm pissed off or something bad happens...the first place that I'll go is...just shoot around (i.e., basketball)...then you just kind of forget about it, you can release some of that energy" – "this is a good way to vent my aggression...competition can do that for me" – "you can vent your 'aggressivity' in an arena that is acceptable to society."

The second category refers to the manner in which sport can regulate mood. This is related to both the process and outcome elements of the sport experience (e.g., running as a mood elevator, or elevated mood after a satisfying competitive result or practice session) – "going for a run is one of the closest things to meditation...it's just very grounding, calming, and soothing...running in the rain, I mean, you're in nature" – "I come off the training session...if I felt it went well, it just lifts my mood...it'll make me want to come back the next day."

The third category reflects the manner in which sport serves a "cleansing" or "freeing" function – "it's sort of freeing, like you're just out for a bike ride (i.e., during a triathlon)...I just tend to have a good time...and just look around a bit like the whole idea of just being out there, and just be doing something." The fourth theme is similar, as it refers to sport as a distractor from daily life problems. Respondents also indicate that sport participation is rejuvenating, and it enables them to face their stressors with renewed vigour – "I look forward to just having...something in my day when I am not thinking about school, work, or anything else... I can have a break from all my problems."

Harmony in living refers to the manner in which sport facilitates a sense of peace and purpose in life. It consists of two categories. The first category reflects a sense of satisfaction from realizing intrinsically interesting and personally relevant achievements –

“it’s something [I do] for myself...like there might be me and two or three other people who honestly care about how I do in wrestling...and aside from that, it isn’t going to affect anyone else...but when I do well, I know I will feel good and feel that I have accomplished something... [leading to] a sense of self-satisfaction.” The second category refers to a sense of harmony from having all life activities focused upon a single, unifying goal. Participants describe experiencing a sense of peace from not having to commit to a number of dissimilar (and sometimes competing) interests and activities – “everything you do comes back to football...everything you do starts to revolve around it...I just encompassed my life around it...it made university way more enjoyable...and now I can’t picture my life without it.”

Section 10: Summary of Results

The foregoing chapters presented the results of the inductive content analyses. These analyses replicate and extend components of the sport commitment model, and they also uncover new constructs believed to further explicate the construct of sport commitment. The following are the highlight of these results:

The highest-order enjoyment constructs are roughly analogous to the original constructs of the sport commitment model. Their component themes, however, have notable differences. With enjoyment, for example, athleticism is recast into process and outcome components, while the concept of flow contains several (additional) components of the construct defined by Csikszentmihalyi (1990). Structure of the activity is a theme original this study and new to the literature. The social opportunities theme is also recast into two main themes: social experiences and guidance / leadership experiences. The social experiences theme is roughly similar to the original construct.

Nevertheless, the camaraderie theme is differentiated into several distinct categories, and the social support construct is differentiated according to the source of the support (i.e., arising from inside or outside the sport community). The theme of guidance / leadership experiences is new to the sport participation literature, and it serves to highlight the relationship between enjoyment, coaching style, and athlete-coach compatibility. It also highlights the relationship between enjoyment and the experience of being a leader. Perceived competence is largely consistent with the existing literature, although the theme of competitive achievement is differentiated into process and outcome components. And finally, the theme of social recognition reveals that while desirable, it is not a central component of sport enjoyment. It also identifies ways in which social recognition can detract from sport enjoyment. And further, it serves to illustrate the salience of social recognition arising from an athlete's own sport community.

Prior to the current study, the remaining constructs of the sport commitment model had not been subjected to qualitative analysis. The data (i.e., thematic hierarchies) from the current study served to differentiate these constructs in ways that could be useful for future research. For example, involvement alternatives includes themes referring to the availability and intensity of alternatives activities. It also focuses on the manner in which preferences are based, and on what factors restrict involvement in alternative activities. It also introduces the idea of competing demands on sport involvement, consistent with the construct of 'other priorities' reported by Scanlan, Russell et al. (2003). Further, it reflects whether or not an athlete's chosen sport is indeed their personal preference.

The personal investments construct is expanded significantly from the mere presence or absence of invested and irretrievable personal resources. The current study introduces the concepts of investment 'boundedness', informed choice, investment expectancies, investment returns, and the commensurability of those returns. The social constraints construct is expanded from the original concept of social obligation to include the themes of internal-external locus of control, direct social pressure, and the desire for social approval. And finally, the involvement opportunities construct is differentiated into a number of categories representing a variety of anticipated benefits from sport involvement.

One of the main findings of the current study is the identification of the three new superordinate constructs. Transcendence / teleology, transformation, and adaptive coping represent the study's main contribution to the literature, and they reflect the author's background in clinical psychology, personality theory, and theory construction.

The following chapter will discuss the significance of the study's findings, their relation to the original research questions, and their implications for future research and practice.

DISCUSSION

This chapter addresses the significance and implications of the current study. The first section examines the relation between the reported findings and the original research questions. The next section presents the rationale and implications of the proposed [major] revisions to the sport commitment model. This is followed by a discussion of methodological concerns and their impact on the trustworthiness of the results. The closing section explores the implications of the current study for research and practice.

Overview of Findings: Relation to the Original Research Questions

Question 1: Are the constructs in the sport commitment model replicable? Do the enjoyment sources reported in the Scanlan, Stein, & Ravizza study (1989) apply to samples other than figure skaters?

All major constructs of the sport commitment model are represented in the current study. So are the major sources of enjoyment reported by Scanlan, Stein, and Ravizza (1989). The confirmability measures taken in this study (i.e., consensual validation, coding reliability checks) indicate that the findings are genuine, and not distortions or creative interpretations on the part of the researcher. These measures serve to demonstrate that the emergent categories are factually based and that the conceptual abstractions are 'close' to the data.

This notwithstanding, it appears that the sport enjoyment and sport commitment sources reported in the literature did indeed apply to the current sample. As a result, the transferability of the sport commitment and sport enjoyment models is extended to include university-level elite sport participants who are actively involved in their competitive careers.

Question 2: How does the model change when applied to actively competing elite athletes from a variety of sports?

By studying athletes who are actively competing, this study is able to avoid (or at least minimize) biases inherent in retrospective recall. As a result, the participant disclosures are based on relatively recent memories. This enhances the likelihood that their memories are accurate representations of their actual experiences. It also enhances the likelihood that the value they assigned to the various commitment and enjoyment sources did not vary with the passage of time.

These factors are believed to have accounted for some of the proposed changes to the sport commitment model. This is particularly the case with the transcendence / teleology construct. In this regard it is proposed that for actively competing athletes, their sport commitment is heavily affected by their goals and dreams – and they are more likely to identify this factor when they are directly under its influence.

The sport commitment model also appears to vary when studying athletes from a variety of sports. In the current sample, for example, team sport participants routinely identified camaraderie, a sense of community, and prosocial character development as major sources of sport commitment and sport enjoyment. This serves to indicate that for some athletes, at least, social attachment and role identification are important determinants of sport participation.

Using a multi-sport sample also serves to highlight the importance of attractive sport-specific features. In this regard the *structure of the activity* theme illustrates how structural components of an activity can affect sport enjoyment.

And finally, it appears that the reported findings are also affected by the fact that the participant sample consists largely of varsity university athletes. This seems to have generated some variance in their commitment profiles, with enjoyment not always listed as the prime determinant. As a result, the current findings provide some insight into the nature of entrapment-based commitment, and on the role of extrinsic factors on sport participation.

Question 3: How does the model change when data are viewed from theoretical orientations beyond social psychology and social cognition?

The most obvious change in the sport commitment model is the inclusion of the higher-order constructs of transcendence / teleology, transformation, and adaptive coping. These constructs are examples of the theoretical 'cross-pollination' advocated by Martens (1987). More specifically, they provide the model with theoretical linkages between the previously disparate fields of social psychology and personality / clinical psychology. They also enable the model to account for sport commitment from a combination of nomothetic and idiographic perspectives.

Finally, and consistent with comments by Roberts (1992), the inclusion of the goal-directed / agentic construct of transcendence / teleology makes the sport commitment model a truly *motivational* theory of sport participation.

Implications for the Sport Commitment Model

The proposed changes to the sport commitment model were presented in earlier chapters. The following is a discussion of the rationale and the conceptual implications of these changes for each of the higher-order constructs.

Enjoyment

Consistent with previous research, enjoyment was the main determinant of sport commitment for much of the participant sample. Not surprisingly, it produced the most elaborate thematic hierarchy of all the constructs in this study.

As noted earlier, concerns were raised about Scanlan's operational definition of sport enjoyment (Kimiecic & Harris, 1996). This definition was criticized for failing to recognize the complexity of the enjoyment construct. Specifically, it was criticized for focusing on immediate momentary pleasures (e.g., fun, liking) while neglecting more enduring phenomena like subjective well-being, life satisfaction, and personal fulfillment.

The current study retained Scanlan's original definition. This occurred because the data clearly indicated that the sample's attraction to sport was based heavily on transitory affective reactions to valued and / or pleasing aspects of the sport experience. And further, this experience was based on events occurring in the past. It was therefore consistent with Scanlan's depiction of enjoyment as an affective *response* to a set of discrete the sport-related experiences.

Despite this, several participants reported that their sport commitment was [at least partly] affected by sport-related life satisfaction and personal fulfillment. And further, these themes referred to a collective appraisal of all sport experiences over time,

particularly as they affected an athlete's overall quality of life. They also referred to the expectation that ongoing sport involvement would continue to create these effects, and in some cases, incrementally. In this regard these themes are markedly existential and future-oriented. To resolve this discrepancy, and to avoid altering the existing enjoyment construct, they were combined to create the construct of transcendence / teleology.

Involvement Alternatives

The 'active ingredient' of this construct was originally believed to be a function of the *attractiveness* of alternative activities. The current findings extended this construct and provided insight into variables that affected these attractions. These variables were the availability and intensity level of alternative activities. The remaining themes went beyond the original concept of attractiveness to reflect potential barriers to alternative activities (e.g., fear of injury, time constraints, and competing life demands). These themes reflected situations in which alternative activities could be rejected, regardless of how attractive they might appear. The final theme reflected whether or not an athlete was indeed participating in their preferred activity. It also provided some insight into the bases upon which these preferences were made.

Investments

Investments was originally defined as personal resources put into an activity that cannot be recovered if participation is discontinued (Scanlan, Carpenter, Schmidt, & Simons, 1993). According to the original model, sport commitment is affected by the presence and magnitude of these personal investments.

The current findings expanded this construct and highlighted the complexity of the investments-commitment relationship. In this regard it appeared that this relationship was a function of (1) knowing what investment was required, (2) being willing to make the investment, (3) expecting a return, (4) getting a return, and (5) being satisfied with the result. Another variable of interest was the theme of investment “boundedness.” It is suggested that this is probably a crucial variable in entrapment-based commitment, particularly for athletes who are dissatisfied with the commensurability of the return on their investments.

In the current study, most participants reported that they were not investment bound. Rather, they stated that they would quit their sport if they no longer enjoyed it. This underscores the importance of enjoyment in determining sport commitment, and it suggests that personal investments exert a minimal influence. It is possible, however, that this finding was affected by artifacts of the participant sample. For example, the majority of participants reported that enjoyment was the determining factor in their continued sport participation. For athletes who are motivated largely by extrinsic factors (e.g., by involvement opportunities), it is possible that investment commensurability and investment “boundedness” can play a greater role in their continued sport participation. In any case, the suggestion here is that the relationship between personal investments and sport commitment can vary depending on whether their participation is enjoyment-based or opportunity-based.

In all, the reported findings for involvement alternatives and investments highlighted the sport commitment model’s origins in social exchange theory. Specifically, they reflected the cognitive (i.e., calculative) component of the model, where

sport participation is [in part] determined by a cost-benefit analysis aimed at maximizing positive outcomes.

Social Constraints

This construct was originally defined in terms of social expectations or norms that result in feelings of obligation to remain in an activity. The current findings expanded this construct by identifying the magnitude and the source of these influences (e.g., parents, friends, team-mates). They also identified personal qualities that could mediate the effect of these social influences (e.g., garnering approval, meeting social expectations, honouring one's obligations). As a result, the expanded construct contains themes cast from a nomothetic as well as an idiographic perspective.

Involvement Opportunities

This construct was originally defined in terms of valued opportunities available only through continued sport involvement. Central to this construct was the *anticipation* of events or experiences, rather than their occurrence per se. In the current study it was this factor that differentiated involvement opportunities from sport enjoyment. A comparison of these constructs would indicate that many of their component themes are similar, if not identical. The distinguishing factor, however, is that the enjoyment themes represent affective responses to events in the past, while the involvement opportunities themes reflect events that have yet to occur (or might never occur). In this regard the involvement opportunities construct is future-oriented, and it reflects the *anticipation* of enjoyable experiences or outcomes.

It is this focus on future *enjoyment* that differentiates involvement opportunities from transcendence / teleology. Whereas involvement opportunities is hedonically-oriented (i.e., in the pursuit of immediate, tangible, momentary pleasure), transcendence / teleology refers to the pursuit of enduring, existential, intangible experiences like personal fulfillment, happiness, and personal meaning or purpose. In this regard involvement opportunities refers to [anticipated] tangible, discrete experiences, while transcendence / teleology refers to intangible, transpersonal, and “spiritual” experiences.

Transcendence / Teleology

This construct is rooted in humanistic-existential psychology. Many of its distinguishing features have already been noted. Nevertheless, transcendence / teleology refers to agentic, goal-directed, meaning-making aspects of sport participation. In this regard it focuses on the manner in which athletes are *impelled* (i.e., drawn) toward goals, rather than being *propelled* toward them by external forces.

An additional feature of the construct is that it represents themes that transcend sport involvement. Having a meaning / purpose and self-actualization, for example, reflect motives that are satisfied by sport, and not necessarily generated by it. This is reflected by quotes indicating that after leaving sport, participants would seek out alternative activities to satisfy their desire to strive, achieve, seek purpose, and find growth.

Transformation

Of all the constructs in this study, transformation exhibits the greatest amount of theoretical “cross-pollination.” For example, it incorporates concepts from a variety of

theoretical perspectives by addressing issues like identity, character, self-efficacy, social learning, locus of control, citizenship, leadership, emotional intelligence, and human potential.

By reflecting formative aspects of sport, transformation introduced a developmental component to the sport commitment model. This suggests a link between developmental and motivational factors that, while seen commonly in personality psychology, is not always present in social psychology. In this manner, transformation appears to bridge what Martens (1987) referred to as a “theoretical divide” between traditionally disparate domains in psychology.

The transformation construct also provides an example of how hermeneutic researchers can see different things in the same (or similar) data. The theme of feeling special, for example, appears in the current study as well as in previous research (Scanlan, Stein, & Ravizza, 1989). In the current study it was incorporated into themes related to high self-esteem and identity formation. Scanlan et al., however, treated it as an outlier. As noted earlier, this is not necessarily a fault of hermeneutic research. Rather, it underscores the need for several researchers to examine the same phenomenon from a variety of perspectives. By doing so, the result is a deeper, richer, more complex understanding of the phenomenon under study.

Adaptive Functioning

This construct has a decidedly idiographic focus. The second-order themes are analogous to concepts appearing in clinical psychology, and they are cast from an individual differences perspective. In this regard, adaptive functioning reflects the

manner in which sport serves as a vehicle for athletes to express and / or compensate for idiosyncratic strengths, weaknesses, or preferences.

The relationship between adaptive functioning and sport commitment is unclear. Nevertheless, the current study serves to highlight how sport enables athletes to adjust to the demands of life and to alter their activity choices to suit their personality. It also provides some insight into potentially optimal modes of functioning, characterized by minimizing competing demands and pursuing goals with personal relevance and meaning

Methodological Limitations

Historical / Situational Fixity and Sampling Issues

Like all research, the current study is historically and contextually situated. And like all qualitative research, it focused on a small number of participants. In the current study, these participants were selected by virtue of their status as elite competitive athletes. They were also recruited from a varsity university population, which increased the likelihood of encountering the phenomenon of entrapment-based commitment. This also enhanced the likelihood of encountering age cohort effects. And finally, while the sample consisted of athletes of both sexes, females were markedly under-represented.

These factors place obvious limitations on the transferability of the current findings. As stated earlier, however, the magnitude of this transferability can never be determined by the “sending context” (i.e., by the author of a study). Rather, this is the task of the “receiving context” (i.e., the research consumers). To facilitate this, the sending context is obligated to provide sufficient detail for research consumers to assess

the trustworthiness of the study, and to determine its relevance to their own particular circumstances. The following section addresses these concerns.

Trustworthiness Issues

The auditability and credibility measures used in this study included prolonged engagement, persistent observation, consensual validation, procedural standardization, procedural explication, factual documentation, and a coding / reliability check. Also included was a disclosure of the researcher's academic, professional, and experiential background. This was done to explicate the researcher's biases. In addition, the emergent categories were accompanied by several raw quotes to demonstrate how the inductive process stayed close to the data.

Despite this, the current study did not employ any triangulation procedures. Since the participants were the only source of information, the data could have been affected by response biases like dissimulation, deception, defensiveness, or impression management. The study also failed to conduct any member checks. This was largely due to logistical reasons like the duration of the analysis period (three years) and participant attrition through graduation, dropout, and relocation. In any event, the failure to conduct member checks limited the opportunity to structurally corroborate the findings, and it posed a potential threat to the credibility of the study.

In a recent review, however, Culver, Gilbert and Trudel (2003), examined the methodological rigour of all qualitative studies published in three major sport psychology journals between 1990 to 1999 (N=84). Based on their findings, it is asserted that the number and scope of the trustworthiness measures used in the current study exceeds the modal standard reported in that literature.

Lessons Learned

As noted earlier, qualitative research is largely exploratory. Because of this, many design considerations are not known in advance of a study. An inevitable consequence of this is that mistakes are made in the process, and lessons are learned along the way. The current study was no exception. The biggest 'take home lesson' in this case is related to the scope and breadth of the study. As a neophyte qualitative researcher, I was unprepared for the volume of data I was required to 'make sense of'. As a result, the data analysis was extremely strenuous, laborious, and time-consuming. At times I likened it to painting the Sistine Chapel with a toothbrush. This had significant motivational consequences for me that resulted in recurrent and prolonged 'holidays' from the project. In hindsight, it would have been more prudent to limit the scope of the dissertation. Instead of revising the entire sport commitment model, for example, I might have limited my study to one or two of the main constructs.

The next 'lesson' relates to the issue of preparedness. When starting this dissertation I had no experience with qualitative research. As a result I had to consult a number of leading texts in the field. In essence, I had to teach myself another way of doing science 'from the ground up'. This required me to become familiar with its philosophy of science, its various traditions, and its various methodologies. While this was interesting, illuminating, and inspiring, it was also time-consuming. This was compounded by my discovery that the uniformity of standards and principles in quantitative research did not necessarily exist in qualitative research. This proved to be quite vexing when methodological decisions based on my earlier readings were undermined by material I read further into the project. In any case, based on these

experiences I recommend that wherever possible, prospective researchers complete formal coursework and / or [prolonged] directed studies long in advance of embarking on their first qualitative project.

The final lesson relates to the issue of topic selection. The literature on qualitative research makes repeated references to the researcher's relationship to their chosen topic. This has implications for their research questions, their chosen methodology, and the manner in which their data are interpreted. In my opinion this also has an impact on the researcher as a person. Given their proximity to the phenomenon, and given the nature of the researcher-participant relationship, it is reasonable to expect that qualitative researchers could be personally affected by their work. In the current study this did indeed occur. Thankfully, the effect was positive. This was hardly surprising, however, since I chose to study a group of people who were [by and large] healthy, successful, prosocial, disciplined, and committed to the pursuit of excellence in domains that were enjoyable and personally meaningful to them. I found that my interactions with the participants were enjoyable, uplifting, and inspiring. And fortunately, I was able to recapture those experiences when reviewing the interview tapes and when analyzing the data. In all, these experiences affirmed for me the importance for researchers to consider the reactive impact of the topics they choose to study.

Implications for Research and Practice

Research

As noted earlier, a series of studies was recently conducted to revise and expand the sport commitment model (Scanlan, Russell, Beals, & Scanlan, 2003; Scanlan, Russell, Wilson, & Scanlan, 2003). These studies were based on a newly-derived interview procedure that combined qualitative and quantitative methodologies. Using the Scanlan Collaborative Interview Method (SCIM) the researchers were not only able to generate emergent themes, but they were also able to assess their salience, their frequency of endorsement, and their direction of influence. In these studies the SCIM was applied to the entire sport commitment model, and it generated a number of proposed revisions. Not surprisingly, some of these revisions were consistent with the results of the current study. Despite this, significant differences remained. The emergence of the three new higher-order constructs was the most obvious example. Of equal significance, however, was the fact that the current study explicated the remaining constructs to a degree far beyond that reported by Scanlan et al. (2003). From this it is suggested that despite Scanlan's recent findings, the sport commitment constructs continue to be too broadly defined.

It is hoped that the results of the current study will provide useful detail for future revisions of the sport commitment model. In this regard it is recommended that future researchers apply the SCIM procedure to the current results, and particularly to the three new higher-order constructs. This would likely provide some insight into the nature, direction, and magnitude of their relationship to sport commitment.

While contributing to the theoretical expansion of the sport commitment model, the current findings also provide considerable detail for the development of items for future surveys and questionnaires. These findings could also contribute to the revision of existing measures like the Sport Commitment Survey and the Sport Enjoyment Survey. Following that, researchers could shift from theory-generation to theory-testing, using the familiar (i.e., quantitative) methods of orthodox science. This would be consistent with Martens' (1987) proposed 'marriage' of the heuristic paradigm and orthodox science.

And finally, it is suggested that the thematic hierarchies generated in this study could have implications for theory and research outside sport psychology. While the lower-order themes are largely sport-specific, it seems likely that the higher-order constructs could apply to other commitment domains. To address this issue the current study could be replicated to discover the component themes for domains like commitment to relationships, careers, religions, and ideologies.

Practical Applications

As noted above, the current findings could enhance the psychometric properties of existing measures of sport enjoyment and sport commitment. They could also contribute to the development of new measures. Over time these instruments could be used by sport psychology consultants to obtain multi-dimensional commitment 'profiles' of individual athletes or entire teams. These profiles could then lead to the development of interventions to enhance sport enjoyment and sport commitment - and ultimately, to reduce sport attrition.

Summary

The current study used a qualitative, hermeneutic approach to expand the sport commitment model. By incorporating concepts from diverse theoretical backgrounds it provided a richer, more complex understanding of the factors that affect sport enjoyment and sport commitment. It also enhanced the generalizability of the model by extending it to actively competing university-level elite athletes. The current study also supplied ample detail to stimulate further theoretical and applied research. Moreover, the current study was consistent with contemporary debates advocating a synthesis of positivistic and naturalistic approaches to science.

REFERENCES

- Alderman, R.A., & Wood, N.L. (1976). An analysis of incentive motivation in young Canadian athletes. *Canadian Journal of Applied Sport Sciences*, 1, 169-175.
- Bandura, A. (1990). Perceived self-efficacy in the exercise of personal agency. *Journal of Applied Sport Psychology*, 2, 128-163.
- Bakker, F.C., De Koning, J.J., Van Ingen, G., & De Root, G. (1993). Motivation of young elite speed skaters. *International Journal of Sport Psychology*, 24, 432-442.
- Biddle, S., Curry, F., Goudas, M., Sarrazin, P., Famose, J.P., & Durand, M. (1995). Development of scales to measure perceived physical education class climate: A cross-national project. *British Journal of Educational Psychology*, 65, 341-358.
- Boyd, M.P., Yin, Z. (1996). Cognitive-affective sources of sport enjoyment in adolescent sport participants. *Adolescence*, 31(122), 383-395.
- Breheeny, K.M. (2002). Motives for running a marathon: The contribution of achievement motivation. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 62(12-B), 5954.
- Brustad, R. (2002). A critical analysis of knowledge construction in sport psychology. In T.S. Horn (Ed.), *Advances in sport psychology* (2nd ed.). Champaign: Human Kinetics
- Burton, D., (1992). Why young wrestlers “hang up” their singlet: An exploratory investigation comparing two models of sport attrition. *Journal of Sport Behaviour*, 15, 209-226.
- Burton, D., & Martens, R. (1986). Pinned down by their own goals: An exploratory investigation into why kids drop out of wrestling. *Journal of Sport Psychology*, 8, 183-197.
- Carpenter, P.J., & Coleman, R. (1998). A longitudinal study of elite youth cricketers' commitment. *International Journal of Sport Psychology*, 29, 195-210.
- Carpenter, P.J., Scanlan, T.K., Simons, J.P., & Lobel, M. (1993). A test of the sport commitment model using structural equation modelling. *Journal of Sport & Exercise Psychology*, 15, 119-133.
- Carpenter, P.J., & Scanlan, T.K. (1998). Changes over time in the determinants of sport commitment. *Pediatric Exercise Science*, 10, 356-365.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper-Collins.

- Csikszentmihalyi, M. (1996). *Creativity*. New York: Harper Perennial.
- Culver, D.M., Gilbert, W.D., & Trudel, P. (2003). A decade of qualitative research in sport psychology journals: 1990-1999. *The Sport Psychologist*, 17(1), 1-15.
- Deci, E.L., & Ryan, R.M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- Denzin, N.K., & Lincoln, Y.S. (Eds.). (2000). *Handbook of qualitative research* (2nd ed.). Thousand Oaks: Sage.
- Dewar, A. & Horn, T.S. (1992). A critical analysis of knowledge construction in sport psychology. In T.S. Horn (Ed.), *Advances in sport psychology* (pp. 13-22). Champaign, IL: Human Kinetics.
- Dishman, R.K. (1983). The identity crisis in North American sport psychology: Academic and professional issues. *Journal of Sport Psychology*, 5, 123-134.
- Duda, J.L. (1988). The relationship between goal perspectives, persistence, and behavioural intensity among male and female recreational sport participants. *Leisure Sciences*, 10, 95-106.
- Duda, J.L. (1989). Goal perspectives, participation, and persistence in sport. *International Journal of Sport Psychology*, 20, 42-56.
- Duda, J.L., & Whitehead, J. (1998). Measurement and goal perspectives in the physical domain. In J.L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 21-48). Morgantown: WV: Fitness Information Technology.
- Ebbeck, V., & Gibbons, S.L. (1998). The effect of a team building program on the self-conceptions of grade 6 and 7 physical education students. *Journal of Sport & Exercise Psychology*, 20, 355-362.
- Feltz, D.L., & Petlichkoff, L.M. (1983). Perceived competence among interscholastic sport participants and dropouts. *Canadian Journal of Applied Sport Sciences*, 8, 231-235.
- Fereyabend, P. (1988). *Against method: Revised Edition*. London: Verso.
- Ferrer-Caja, E., & Weiss, M.R. (2000). Predictors of intrinsic motivation among adolescent students in physical education. *Research Quarterly for Exercise and Sport*, 71, 267-279.
- Fielding, N.G., & Lee, R.M. (1998). *Computer analysis and qualitative research*. London: Sage.
- Finkelhor, D. (1984). *Child sexual abuse: New theory and research*. New York: Free Press.

- Gill, D.L., Gross, J.B., & Huddleston, S. (1983). Participation motivation in youth sports. *International Journal of Sport Psychology, 14*(1), 1-14.
- Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam.
- Goleman, D. (1998, November-December). What makes a leader? *Harvard Business Review, 93*-102.
- Gould, D. (1982). Sport psychology in the 1980's: Status, direction, and challenge in youth sports research. *Journal of Sport Psychology, 4*, 203-218.
- Gould, D. (1987). Understanding attrition in youth sport. In D. Gould & M.R. Weiss (Eds.), *Advances in pediatric sport science: Vol. 2. Behavioral issues* (pp.61-85). Champaign, IL: Human Kinetics
- Gould, D., Feltz, D., & Weiss, M. (1985). Motives for participating in competitive youth swimming. *International Journal of Sport Psychology, 16*, 126-140.
- Gould, D., Horn, T. (1984). Participation motivation in youth sports. In J.M. Silva & R.S. Weinberg (Eds.), *Psychological foundations of sport* (pp. 359-370). Champaign, IL: Human Kinetics.
- Guillet, E.U., Sarrazin, P., Carpenter, P.J., Trouilloud, D., & Curry, F. (2002). Predicting persistence or withdrawal in female handballers with social exchange theory. *International Journal of Psychology, 37*(2), 92-104.
- Hanin, Y.L. (Ed). (2000). *Emotions in sport*. Champaign, IL: Human Kinetics.
- Harre, R. (1985). *The philosophies of science* (2nd ed.). New York: Oxford.
- Harter, S. (1978). Effectance motivation reconsidered. *Human Development, 21*, 34-64.
- Harter, S. (1981). The development of competence motivation in the mastery of cognitive and physical skills: Is there still a place for joy? In G.C. Roberts & D.M. Landers (Eds.), *Psychology of motor behaviour and sport-1980* (pp. 3-29). Champaign: Human Kinetics.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York: Guilford Press.
- Helsen, W.F., Starkes, J.L., & Hodges, N.J. (1998). Team sports and the theory of deliberate practice. *Journal of Sport & Exercise Psychology, 20*(1), 12-34.
- Iso-Ahola, S.E. (1980). *The social psychology of leisure and recreation*. Dubuque, IA: William C. Brown.
- Jackson, S.A. (2000). Joy, fun, and flow state in sport. In Y.L. Hanin (Ed.), *Emotions in sport* (pp. 135-155). Champaign: Human Kinetics.

- Jackson, S.A., & Csikszentmihaly, M. (1999). *Flow in sports: The keys to optimal experiences and performances*. Champaign, IL: Human Kinetics.
- Kimiecik, J.C., & Harris, A.T. (1996). What is enjoyment? A conceptual / definitional analysis with implications for sport and exercise psychology. *Journal of Sport & Exercise Psychology, 18*, 247-263.
- Klint, K.A., & Weiss, M.R. (1987). Perceived competence and motives for participating in youth sports: A test of Harter's competence motivation theory. *Journal of Sport Psychology, 9*, 55-65.
- Konstantinos, A., Zahariadis, P., Tsorbatzoudis, C. & Grouios, G. (2002). Testing the Sport Commitment Model in the context of exercise and fitness participation. *Journal of Sport Behaviour, 25*(3), 217-230.
- Lakatos, I., & Musgrave, A. (Eds.). (1970). *Criticism and the growth of knowledge*. New York: Cambridge.
- Landers, D.M. (1983). Whatever happened to theory testing in sport psychology? *Journal of Sport Psychology, 5*, 135-151.
- Leahy, T.H. (1987). *A history of psychology: Main currents in psychological thought*. Englewood Cliffs, NJ: Prentice-Hall.
- Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills: Sage.
- Mahoney, M.J. (1990). *Human change processes*. New York: Basic Books.
- Marlatt, G.A. (1982). Relapse prevention: A self-control program for the treatment of addictive behaviours. In R.B. Stuart (Ed.), *Adherence, compliance and generalization in behavioural medicine* (pp. 329-378). New York: Brunner / Mazel.
- Martens, R. (1987). Science, knowledge, and sport psychology. *The Sport Psychologist, 1*, 29-55.
- Miles, M.B., & Huberman, A.M. (1984). *Qualitative data analysis*. Beverly Hills, CA: Sage.
- Nicholls, J.G. (1984). Achievement motivation: Conceptions of ability, subjective experience, task choice, and performance. *Psychological Review, 91*, 328-346.
- Orlick, T.D., & Mosher, R. (1978). Extrinsic rewards and participation motivation in a sport related task. *International Journal of Sport Psychology, 9*, 27-39.
- Paranjpe, A. C. (1998). *Self and identity in modern psychology and Indian thought*. New York: Plenum.
- Patton, M.Q. (1980). *Qualitative evaluation methods*. Beverly Hills, CA: Sage.

- Petlichkoff, L.M. (1993a). Group differences on achievement goal orientations, perceived ability, and level of satisfaction during an athletic season. *Pediatric Exercise Science*, 5, 12-24.
- Petlichkoff, L.M. (1993b). Relationship of player status and time of season to achievement goals and perceived ability in interscholastic athletes. *Pediatric Exercise Science*, 5, 242-252.
- Raedeke, T.D. (1997). Is athlete burnout more than just stress? A sport commitment perspective. *Journal of Sport & Exercise Psychology*, 19, 396-417.
- Roberts, G.C. (Ed.). (1992). *Advances in motivation in sport and exercise*. Champaign, IL: Human Kinetics.
- Roberts, G.C. (Ed.). (2001). *Advances in motivation in sport and exercise* (2nd ed.). Champaign, IL: Human Kinetics.
- Roberts, G.C., Kleiber, D., & Duda, J.L. (1981). An analysis of motivation in children's sport: The role of perceived competence in participation. *Journal of Sport Psychology*, 3, 206-216.
- Roberts, G.C., Treasure, D.C., & Kavussanu, M. (1997). Motivation in physical activity contexts: An achievement goal perspective. In M. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 413-447). Greenwich, CT: JAI Press.
- Rogers, C. (1951). *Client-centered therapy*. Boston: Houghton Mifflin.
- Rudestam, K.E. & Newton, R.R. (1992). *Surviving your dissertation: A comprehensive guide to content and process*. Newbury Park, CA: Sage.
- Rusbult, C.E. (1980). Commitment and satisfaction in romantic associations: A test of the investment model. *Journal of Experimental Social Psychology*, 16, 172-186.
- Ryan, E.D. (1980). Attribution, intrinsic motivation, and athletics: A replication and extension. In C.H. Nadeau, W.R. Halliwell, K.M. Newell, & G.C. Roberts (Eds.), *Psychology of motor behaviour and sport – 1979* (pp. 19-26). Champaign: Human Kinetics.
- Ryckman, R.M., & Hamel, (1993) Perceived physical ability differences in the sport participation motives of young athletes. *International Journal of Sport Psychology*, 24, 270-283.
- Scanlan, T.K., Carpenter, P.J., Lobel, M., & Simons, J.P. (1993). Sources of enjoyment for youth sport athletes. *Pediatric Exercise Science*, 5, 275-285.

- Scanlan, T.K., Carpenter, P.J., Schmidt, G.W., Simons, J.P., & Keeler, B. (1993). An introduction to the sport commitment model. *Journal of Sport & Exercise Psychology, 15*, 1-15.
- Scanlan, T.K., & Lewthwaite, R. (1986). Social psychological aspects of competition for male youth sport participants: IV. Predictors of enjoyment. *Journal of Sport Psychology, 8*, 25-35.
- Scanlan, T.K., Russell, D.G., Beals, K.P., & Scanlan, L.A. (2003). Project on elite athlete commitment (PEAK): II. A direct test and expansion of the sport commitment model with elite amateur sportsmen. *Journal of Sport and Exercise Psychology, 25*(3), 377-401.
- Scanlan, T.K., Russell, D.G., Wilson, N.C., & Scanlan, L.A. (2003). Project on elite athlete commitment (PEAK): I. Introduction and methodology. *Journal of Sport and Exercise Psychology, 25*(3), 360-377.
- Scanlan, T.K., & Simons, J.P. (1992). The construct of sport enjoyment. In G.C. Roberts (Ed.), *Motivation in sport and exercise* (pp. 199-215). Champaign: Human Kinetics.
- Scanlan, T.K., Simons, J.P., Carpenter, P.J., Schmidt, G.W., & Keeler, B. (1993). The Sport Commitment Model: Measurement development for the youth sport domain. *Journal of Sport & Exercise Psychology, 15*, 16-38.
- Scanlan, T.K., Stein, G.L., & Ravizza, K. (1989). An in-depth study of former figure skaters: II. Sources of enjoyment. *Journal of Sport & Exercise Psychology, 11*, 65-83.
- Schmidt, G.W., & Stein, G. L. (1991). Sport commitment: A model integrating enjoyment, dropout, and burnout. *Journal of Sport and Exercise Psychology, 13*(3), 254-265.
- Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology. *American Psychologist, 55*(1), 5-14.
- Smith, R.E. (1986). Toward a cognitive-affective model of athletic burnout. *Journal of Sport Psychology, 8*, 36-50.
- Snyder, C.R., & Lopes, S.J. (2002). *Handbook of positive psychology*. New York: Oxford.
- Starkes, J. (2000). The road to expertise: Is practice the only determinant? *International Journal of Sport Psychology, 31*(4), 431-451.
- Thibaut, J.W., & Kelley, H.H. (1959). *The social psychology of groups*. New York: Wiley.
- Treasure, D.C., & Roberts, G.C. (1995). Achievement goals, motivational climate, and achievement strategies and behaviours in sport. *International Journal of Sport Psychology, 26*, 64-80.

- Vallerand, R.J. (1983). The effect of differential amounts of positive verbal feedback on the intrinsic motivation of male hockey players. *Journal of Sport Psychology*, 5, 100-107.
- Vallerand, R.J., & Blanchard, C.M. (2000). In Y.L. Hanin (Ed.), *Emotions in sport* (pp. 3-38). Champaign: Human Kinetics.
- Vallerand, R.J., & Losier, G.F. (1999). An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology*, 11, 142-169.
- Wankel, L.M., & Kreisel, P.S.J. (1985). Factors underlying enjoyment in youth sports: Sport and age group comparisons. *Journal of Sport Psychology*, 7, 51-64.
- Weiss, W.M., & Chaumeton, N. (1992). Motivational orientations in sport. In T.S. Horn (Ed.), *Advances in sport psychology* (pp. 61-100). Champaign: Human Kinetics.
- Weiss, W.M., & Ferrer-Caja, E. (2002). Motivational orientations and sport behaviour. In T.S. Horn (Ed.), *Advances in sport psychology* (2nd ed.). Champaign: Human Kinetics.
- Weiss, W.M., & Frazer, K.M. (1995). Initial, continued, and sustained motivation in adolescent female athletes: a season-long analysis. *Pediatric Exercise Science*, 7, 314-329.
- Weiss, W.M., Kimmell, L.A., & Smith, A.L. (2001). Determinants of sport commitment among junior tennis players: Enjoyment as a mediating variable. *Pediatric Exercise Science*, 13, 131-144.
- Weiss, W.M., & Petlichkoff, L.M. (1989). Children's motivation for participation in and withdrawal from sport: Identifying the missing links. *Pediatric Exercise Science*, 1, 195-211.
- Weiss, W.M., & Weiss, M.R. (2003). Attraction- and entrapment-based commitment among competitive gymnasts. *Journal of Sport & Exercise Psychology*, 25(2), 229-247.
- Weitzmann, E.A., & Miles, M.B. (1995). *Computer programs for qualitative data analysis*. Newbury Park: Sage.
- White, S.A., & Duda, J.L. (1994). The relationship of gender, level of sport involvement, and participation motivation to task and ego orientations. *International Journal of Sport Psychology*, 25, 4-18.
- Whitehead, J.R., & Corbin, C.B. (1991). Youth fitness testing: The effect of percentile-based evaluation feedback on intrinsic motivation. *Research Quarterly for Exercise and Sport*, 62, 225-231.

APPENDIX A: COMMITMENT/ENJOYMENT

INTERVIEW SCHEDULE

Phase I: Introduction and Orienting Instructions

Thank you for participating in this study. This study is designed to examine factors influencing your enjoyment and commitment to your sport. The information collected here will be used as part of the dissertation for my Ph.D. in clinical psychology. Some of the information will be obtained from structured questionnaires, while other information will be collected from open-ended questions posed in an interview. For ease of data collection, all interview material will be audiotaped and transcribed later.

This interview will involve open-ended questions as well as guided questions. As well, you will be asked to do some brief ratings based on your responses. When answering all questions please be sure that you are commenting on your ENTIRE sport experience. That is, make sure that you are considering both your competitive and noncompetitive (i.e. training, traveling, social) experiences relating to your participation in (program). As well, be sure to comment on how this material affects your enjoyment and commitment THIS SEASON, and not at any other period in your life.

Phase II: Open-Ended Questions (Enjoyment)

A. Define Enjoyment Construct:

Before we begin with questions on enjoyment, I'd better specify for you what I mean by it. By enjoyment, I'm referring to the positive feelings or emotions that you have about your (program/sport) experience such as pleasure, fun, liking, or loving the experience

B. Open-Ended Enjoyment Question:

1. What do you consider to be the major causes or sources of your enjoyment of (program) is season? (WRITE THEM DOWN)
2. General Probe: What else caused or contributed to your enjoyment of (sport/program)?

(RETURN TO LIST FOR ELABORATIONS)

3. Clarification/Elaboration Probes:

- a) Clarification: I'm not sure I understand what you mean. Would you please go over that again?

b) Elaboration:

- i) What was it about [specific source] that made it a source of enjoyment for you?
- ii) What did [specific source] mean to you that made it so enjoyable?

(minimum 2 elaboration probes/source)

Phase III: Open-Ended Questions (Commitment)

A. Reminder of orienting instructions

When answering all questions please be sure that you are commenting on your ENTIRE sport experience. That is, make sure that you are considering both your competitive and noncompetitive (i.e. training, travelling, social) experiences relating to your participation in (program). As well, be sure to comment on how this material affects your commitment THIS SEASON, and not at any other period in your life.

B. Define Commitment Construct:

By commitment I'm referring to a psychological concept that represents an athlete's desire, dedication, and determination to continue sport participation. It represents an athlete's psychological state of attachment to participation. Basically, it accounts for what keeps an athlete "going" in their sport.

C. Open-Ended Commitment Question:

1. Considering the your entire sport experience, both on the (playing field) and off, what do you consider to be the major causes or sources of your commitment to (program)?
2. General Probe: What else may have caused or influenced your commitment to [sport/program]?
3. Clarification/Elaboration Probes:
 - a) Clarification: I'm not sure I understand what you mean. Would you please go over that again?
 - b) Elaboration:
 - i) What was it about [specific source] that made it influence your commitment to (program)?

(minimum 2 elaboration probes/source)

Phase IV: Guided Questions (Commitment)

- A. Involvement Alternatives:
 - 1. Are there other activities available to you that you could participate in instead of (program)? If so, how appealing are they to you? In what ways?
- B. Personal Investments:
 - 1. Many people in your position have invested a lot of time, effort, and/or money to get where they are in their sport. Do you think your continued commitment to (program) is influenced by this? If so, in what ways?
- C. Social Constraints:
 - 1. Do you feel obliged in any way to continue playing in (program)? If so, please explain.
- D. Involvement Opportunities:
 - 1. What would you miss if you stopped playing in (program)?

Phase V: Guided Questions (Enjoyment)

- A. Social and Life Opportunities:
 - 1. Does your involvement in (program) provide you with enjoyable social and life opportunities?

If so, what are they?
- B. Perceived Competence:
 - 1. Does getting better/being good contribute to your enjoyment of (program)? In what ways?
- C. Social Recognition of Competence
 - 1. Does social recognition contribute to your enjoyment of (program)? In what ways?
- D. Act of (sport in question)
 - 1. Is there something about the act of (sport in question) itself that you find enjoyable? In what ways?
- E. Special Cases
 - 1. Do you recognize any personal benefits you've gotten from participating in (program)? What are they? (may need to reword this to capture the essence of the constructs)

Phase VI: Conclusion

- A. Advice/comment on commitment/enjoyment in sport (for coaches, parents, and athletes)
 - 1. Do you have any comments or advice for coaches, athletes, and parents on factors that influence commitment and enjoyment in sport?
- B. Feedback on the interview process
 - 1. Do you have any comments on this interview process? Do you think anything was left out?

Any suggestions on how it might be improved?

APPENDIX B: INFORMED CONSENT BY SUBJECTS TO PARTICIPATE IN A RESEARCH PROJECT

Project Title: *Sport Commitment and Sport Enjoyment in Elite Athletes*
-- *Quantitative And Qualitative Approaches To Generalizing Scanlan's Models*

Principal investigator: Rob Roy, M.A.
Department of Psychology
Simon Fraser University

The university and those conducting this study subscribe to the ethical conduct of research and to the protection at all times of the interests, comfort, and safety of subjects. This form and the information it contains are given to you for your own protection to provide you with a full understanding of the procedures and potential risks involved in this study.

This study requires you to participate in an open-ended interview with the principal investigator. Topics will focus upon factors related to sport commitment and sport enjoyment, and how they contribute to your high level of sport participation. You will also be given two survey measures currently under development for use in measuring sport commitment and sport enjoyment. You will be asked to comment on the material covered in these surveys and on the form of the survey itself (i.e. wording/clarity of the items, etc.). The interview will last approximately ninety minutes. All interviews will be audio-taped and analyzed later. All tapes will be coded by number only, to protect your privacy. At the completion of the study all tapes will be stored in a secure location and eventually erased.

Participation in this study poses few personal risks. Instead, it may help you arrive at a better understanding of your love for sport and it may enhance your enjoyment and commitment to it. It could, however, cause you to examine and question the bases for your current and future involvement. Should this be the case, and should this cause you concern, counselling services (independent of this study) will be available to you through Student Services at 291-3694.

Having been asked by ROB ROY, M.A. of the DEPARTMENT OF PSYCHOLOGY of Simon Fraser University to participate in this study, I have read the procedures specified in this document. I understand the procedures to be used in this project and the personal risks and benefits associated with my participation. I have been informed that the research materials will be kept confidential. Upon completion of this study I may obtain copies of the results by contacting the principal investigator at 291-3354.

I understand that I may withdraw my participation (and any information I have provided) in this project at any time, without censure or penalty. I also understand that I may register any complaint I might have about the study with the principal investigator or with Christopher Webster, Ph.D., Chair, Department of Psychology, Simon Fraser University, at 291-3354.

I agree to participate in this study by taking part in an open-ended interview on sport commitment and sport enjoyment at _____.

NAME (please print): _____ DATE: _____

SIGNATURE: _____ WITNESS: _____

APPENDIX C: NUMBER OF PARTICIPANTS AND PERCENTAGE OF SAMPLE ENDORSING EACH OF THE EMERGENT CATEGORIES

Enjoyment

- I. Act of [Sport] 24(96)
 - A. Drama / Excitement of Competition 20(80)
 - 1. Risk taking / high stakes 2(8)
 - 2. Drama / glory 7(28)
 - 3. Adrenaline rush 15(60)
 - 4. Precompetition rush / anxiety 3(12)
 - 5. Big, spectacular plays 3(12)
 - B. Movement / Sensation Experiences 11(44)
 - 1. Performing moves / skills 9(36)
 - 2. Endorphin high 2(8)
 - C. Athleticism 8(32)
 - 1. Athletic process 7(28)
 - a) Strenuous activity 6(24)
 - b) Maximal effort 1(4)
 - 2. Athletic outcome 2(8)
 - a) Releasing tension from precompetition anxiety 2(8)
 - D. Structure of the Activity 14(56)
 - 1. Attractive sport-specific features 13(52)
 - a) A sport for all body types (wrestling) 2(8)
 - b) Grappling / playfighting (wrestling) 2(8)
 - c) Natural: no equipment / apparatus (wrestling) 4(16)
 - d) Impartial judging (wrestling) 1(4)
 - e) North American style of play (basketball) 1(4)
 - f) Lots of scoring (basketball) 1(4)
 - g) Aggressive / lots of hitting (football) 3(12)
 - h) Getting the ball (soccer) 1(4)
 - i) Solitary activity (running) 1(4)
 - j) Outdoor activity / no boundaries (running) 2(8)
 - 2. Personal responsibility / individual focus 6(24)
 - a) "Personal" wins 1(4)
 - b) Limited politics / coach involvement 1(4)
 - c) Personal responsibility for outcome 3(12)
 - d) Making my own / unique contribution 2(8)
 - e) Personal responsibility for training / motivation 1(4)

- E. Flow 22(88)
 - 1. Merging of action / awareness 9(36)
 - a) Smooth, effortless execution 8(32)
 - b) Team performing in harmony 4(16)
 - 2. Autotelic behaviour 19(76)
 - a) Playfulness / fun / love it 19(76)
 - 3. Challenging / requires many skills 13(52)
 - a) Physically / technically demanding 9(36)
 - b) Tactically demanding 5(20)
 - c) Mentally demanding 3(12)
 - d) Competition demands 2(8)
 - e) Facing challenging opponents 2(8)
 - f) Confident I can do well / feeling prepared 2(8)
 - 4. Absorption 7(28)
 - a) Intense focus / immersion 7(28)
 - 5. Goals and feedback 9(36)
 - a) Tangible feedback on progress 6(24)
 - b) Having an individual task / assignment (team sports) 4(16)
 - 6. Paradox of control 5(20)
 - a) Automatic functioning 4(16)
 - b) Controlling / dictating the course of a match 1(4)
 - 7. Transformation of time 2(8)
 - a) Altered time perception 2(8)
 - 8. Being creative / dynamic 6(24)
 - a) Inventing moves / being creative, dynamic 6(24)

- II. Social Opportunities 25(100)
 - A. Guidance / Leadership Experiences 13(52)
 - 1. Coaching Style 10(40)
 - a) Authoritative Coaching 9(36)
 - (1) Providing support / guidance 7(28)
 - (2) Allowing athlete input into training decisions 4(16)
 - (3) Individualized / customized approach 1(4)
 - b) Authoritarian Coaching 1(4)
 - (1) Autocratic, critical style 1(4)
 - c) Personal Compatibility with Coaching Style 2(8)
 - 2. Mentor / Pupil Experiences 5(20)
 - a) Mentoring / coaching rookies and junior players 3(12)
 - b) Being mentored by veterans and alumni 3(12)
 - c) Mentor-pupil relationship with coach 3(12)

- A. Social Experiences
 - 3. Camaraderie 25(100)
 - a) Empathetic Relationships with Teammates 18(72)
 - (1) Common experience base 6(24)
 - (2) Relationships with like-minded people 10(40)
 - (3) Estrangement from teammates 2(8)
 - (4) Being with people with similar / common goals 12(48)
 - (5) Appreciation of commitment and effort invested 5(20)
 - b) Close, Intimate Relationships with Teammates 21(84)
 - (1) Constant, close contact (training, traveling) 14(56)
 - (2) Close, caring relationships 14(56)
 - (3) Egalitarian relationships / loyalty / respect 5(20)
 - (4) Sharing new experiences 6(24)
 - (5) Sharing adversities and triumphs 11(44)
 - c) Regular, Varied Social Contact 17(68)
 - (1) Large social circle 16(64)
 - (2) Socializing with teammates 18(72)
 - (3) Playing alongside my friends 3(12)
 - (4) Meeting athletes of the opposite sex 3(12)
 - d) Sense of Community / 'Civic Pride' 17(68)
 - (1) A sense of community / fraternity 7(28)
 - (2) Team cohesion / solidarity 13(52)
 - (3) Giving back / contributing to the athletic community 1(4)
 - 4. Social Support / Encouragement 18(72)
 - a) Support / Encouragement from the Sport Community 14(56)
 - (1) Support / encouragement from teammates (re: sport issues) 9(36)
 - (2) Support / encouragement from teammates (re: life issues) 6(24)
 - (3) Fan support / encouragement 1(4)
 - b) Support / encouragement from outside the sport community 6(24)
 - (1) Parental encouragement / involvement 4(16)
 - (2) Peer encouragement / support (non-sport peers) 3(12)
- III. Perceived Competence 25(100)
 - A. Mastery 19(76)
 - 1. Mastery Outcome 13(52)
 - a) Being good 11(44)
 - b) Pride in overcoming hardships / challenges 2(8)
 - c) Satisfaction from doing my best / giving a full effort 4(16)
 - 2. Mastery Process 10(40)
 - a) Improvement / mastery 8(32)
 - b) Studying the game / learning from others 4(16)
 - c) Professional approach to training / competing 2(8)

B. Competitive Achievement

1. Competitive Outcome 23(92)
 - a) Competitive Success 23(92)
 - (1) Conquering / defeating / smiting opponents 3(12)
 - (2) Demonstrating superiority over opponents 8(32)
 - (3) Pride / feelings of accomplishment from winning 15(60)
 - (4) Winning / succeeding (in and of itself) 8(32)
 - (5) Joy from overcoming the challenges of competition 3(12)
 - (6) Team success / winning championships 3(12)
 - (7) Competing at a high level 8(32)
 - (8) Making high-level teams 4(16)
 - (9) Contributing to my team's success 1(4)
 - b) Competitive Improvement 8(32)
 - (1) Improved Performance (wins, personal records) 7(28)
 - (2) Rating / testing myself against the best opponents 1(4)
 - (3) Improved rankings / standing 2(8)
 2. Competitive Process 17(68)
 - a) Competitive Strivings / Striving to Excel 5(20)
 - (1) Striving to win / beat opponents 5(20)
 - (2) Striving to prove my superiority / competence 1(4)
 - (3) Personal / team rivalries 1(4)
 - b) Competing Well 15(60)
 - (1) Fulfilling my assignment / doing my job 2(8)
 - (2) Competing / performing to one's potential 7(28)
 - (3) Hard work paying off: Executing plays / skills 11(44)
 - (4) Improved performance (despite losing) 2(8)
 - (5) Overcoming doubt / performing beyond expectations 2(8)
- C. Performance Achievement 2(8)
1. Displaying my skills (i.e. to a crowd) 2(8)

IV. Social Recognition 25(100)

- A. Recognition from the Sport Community 13(52)
 1. Recognition / respect / awards from sport peers 13(52)
 2. Recognition / reinforcement from coach 5(20)
 3. Coach showing confidence in me 1(4)
 4. Fan recognition 5(20)
- B. Public Acclaim 22(88)
 1. Promotional activities / celebrity 2(8)
 2. Recognition from the opposite sex 1(4)
 3. Recognition from media 13(52)
 4. Recognition from non-sport public 6(24)
 5. Recognition from non-sport peers and teachers 9(36)
- C. Incidental Benefit 16(64)
 1. Seldom occurs 7(28)
 2. A bonus; not central to enjoyment 14(56)
 3. Would like more media exposure 2(8)

- D. Enjoyment Detractors 3(12)
 - 1. Pressure to win 2(8)
 - 2. Notoriety / ostracism 1(4)

- V. Unique Life Experiences / Perks 24(96)
 - A. Travel Experiences 20(80)
 - 1. Travel / free trips 15(60)
 - 2. Seeing interesting places / travel adventures 8(32)
 - 3. Meeting people all over the world 6(24)
 - 4. Visiting / experiencing / learning about other cultures 8(32)
 - 5. Travel as a break from the monotony of life / training 2(8)
 - 6. Competing at a variety of venues 2(8)
 - B. Unique Experiences 3(12)
 - 1. Experiencing history firsthand 1(4)
 - 2. Meeting celebrity athletes 2(8)
 - 3. Experiencing unique events 1(4)
 - C. Lifestyle Benefits / Experiences 11(44)
 - 1. Disciplined, structured lifestyle 10(40)
 - 2. Rigorous, physically intense lifestyle 2(8)
 - 3. Fun, novelty-filled lifestyle 1(4)
 - 4. A daily sense of accomplishment 2(8)
 - 5. A daily dose of competition 1(4)
 - D. Tangible Benefits 14(56)
 - 1. Opportunity to become bilingual 1(4)
 - 2. Free / cheap education / scholarship 12(48)
 - 3. Networking / job opportunities 6(24)
 - 4. Special privileges / perks 3(12)
 - 5. Funding / carding 1(4)

Involvement Alternatives

- I. Availability of Alternatives
 - A. No alternatives 4(16)
 - B. This is all I know / not knowing what else to do 1(4)
 - C. Alternatives exist (participating in them) 18(72)

- II. Availability of Similar Intensity Alternatives
 - A. Nothing available at the same level 2(8)
 - B. Something available at the same level 2(8)

- III. Preferred Alternative
 - A. Preferred choice 18(72)
 - B. All-consuming preoccupation 9(36)
 - C. Top priority in my life; alter my lifestyle to suit it 7(28)
 - D. Preference / attractiveness: f()
 - 1. Achievement / success potential 1(4)
 - 2. Involvement opportunities 1(4)
 - 3. Investments 1(4)
 - E. Could use a distraction / something just for fun 3(12)
- IV. Alternatives Restricted 14(56)
 - A. Alternatives restricted by fear of injury 5(20)
 - B. Alternatives restricted by time constraints 10(40)
- V. Competing Life Demands / Obligations 6(24)
 - A. Expanding horizons / getting on with life 2(8)
 - B. Balancing sport with other life demands 4(16)
 - C. Having an understanding / facilitative support network 1(4)

Investments

- I. Sacrifices / Investments Made 13(52)
 - A. Passed up jobs, financial stability 2(8)
 - B. Missed out on social / recreational opportunities (e.g. vacations, travel) 6(24)
 - C. Left family and friends behind 1(4)
 - D. Sacrificed / compromised my grades 1(4)
 - E. Time and effort invested 6(24)
 - F. Money invested 1(4)
- II. Investment "Boundedness"
 - A. Investment bound 8(32)
 - B. Not investment bound 11(44)
- III. "Informed Choice": Knowledge / Desire to Invest 10(40)
 - A. Knowing investment required for success 7(28)
 - B. Willing to invest 7(28)
- IV. Expecting a Return on Investments 8(32)
 - A. Expecting a return (i.e. increasing returns) 8(32)
- V. Getting a Return on Investments 10(40)
 - A. Investments paying off (re: outcome – bigger rewards, higher level competition) 10(40)

- VI. Perceived Commensurability of Return on Investments 6(24)
 - A. Not feeling “owed” by the sport 2(8)
 - B. Considering the investments / sacrifices worthwhile (after the fact) 6(24)

Social Constraints

- I. Other-Determined Involvement 2(8)
 - C. Constrained 2(8)
- II. Self-Determined Involvement 15(60)
 - A. Not constrained / would leave if not happy 12(48)
 - B. Living life for me / doing what’s best for me 6(24)
 - C. Living up to my word / publicly stated commitment 2(8)
- III. Pleasing Others / Garnering Approval 10(40)
 - A. Obtaining parental approval / making them proud 7(28)
 - B. Proving doubters wrong / coming back from injury / not looking like a quitter 4(16)
 - C. Being an ambassador to my country 1(4)
- IV. Direct Social Pressure 6(24)
 - A. Parents encouraging me to continue 2(8)
 - B. Friends encouraging me to continue 2(8)
 - C. Teammates encouraging me to continue 4(16)
- V. Meeting Other People’s Expectations 9(36)
 - A. Pleasing coaches / living up to their expectations / making them proud 7(28)
 - B. Meeting perceived social expectations (i.e. team, media, etc.) 5(20)
 - C. Embarrassment for still competing (and not moving on with life) 1(4)
- VI. Meeting / Fulfilling My Obligations 13(52)
 - A. Others’ investment in me (i.e. team, coach, school) 6(24)
 - B. Honouring the terms of my scholarship 3(12)
 - C. Accountability to teammates 6(24)

Involvement Opportunities

- I. Psychological / Experiential Benefits of Involvement
 - A. Enjoyment / Fun / Autotelic Activity 4(16)
 - 1. Doing something I love 3(12)
 - 2. Fun / being playful 1(4)

- B. The Thrill / Experience of Competing 17(68)
 - 1. Winning / scoring / executing moves 4(16)
 - 2. The feeling / thrill of competition 7(28)
 - 3. Drama / glory 1(4)
 - 4. Performing / being in front of a crowd 1(4)
 - 5. Competitiveness / competing 7(28)
 - 6. Playing at a high level 6(24)
 - C. The Opportunity for Unique / Special Experiences 11(44)
 - 1. Opportunity to experience unique events (e.g. Olympics) 1(4)
 - 2. Wanting no regrets / missed opportunities 11(44)
 - D. Transcendence / Achievement Opportunities 6(24)
 - 1. Opportunity to excel 1(4)
 - 2. Opportunity to give 100% / full effort at something 1(4)
 - 3. Opportunity for challenges 4(16)
 - 4. Opportunity to have a direction / purpose 2(8)
 - 5. Opportunity to show courage 1(4)
- II. Physical Rewards / Benefits of Involvement
- A. Athleticism 12(48)
 - 1. Training 7(28)
 - 2. Being in shape 4(16)
 - 3. The exertion of playing 2(8)
- III. Tangible Benefits / Rewards of Involvement
- A. Career opportunities 15(60)
 - 1. University education / scholarship 11(44)
 - 2. Playing professional 7(28)
 - 3. Getting paid to do something I love 2(8)
 - 4. Networking / job contacts 6(24)
 - 5. Career spinoffs (e.g. coaching, public speaking) 2(8)
 - B. Lifestyle Benefits 9(36)
 - 1. Structured lifestyle / routine 2(8)
 - 2. Active, healthy lifestyle / longevity 6(24)
 - 3. Physically and mentally intense lifestyle 1(4)
 - C. Perks 4(16)
 - 1. Trips with the team 1(4)
 - 2. All-expense paid trips / travel points 2(8)
 - 3. Special privileges (e.g. getting laundry done) 1(4)
- IV. Social Benefits of Involvement 15(60)
- A. Being with friends / coaches / teammates 12(48)
 - B. Being on a team 2(8)
 - C. Shared passion with teammates 2(8)
 - D. Being special / high profile 1(4)
 - E. Travel / meeting people 2(8)
 - F. Socializing with teammates 3(12)

- V. No Benefits 1(4)
 - A. Wouldn't miss much 1(4)

Transcendence / Teleology

- I. Having Defined Goals 19(76)
 - A. Outcome Goals 16(64)
 - 1. Wanting to reach the highest level of my sport 12(48)
 - 2. Desire to be the best / to win 7(28)
 - 3. Wanting to get funds to legitimize my involvement 1(4)
 - 4. Wanting to finish my career on a "high" 2(8)
 - 5. Wanting closure / to finish what I started 5(20)
- II. Maintaining My Standing 7(28)
 - A. Wanting to stay number one / staying at this level 7(28)
- III. Mastery Goals 14(56)
 - A. Having cascading / incremental mastery goals (sport-specific) 3(12)
 - B. Wanting to be good / as good as I can get 13(52)
- IV. Having a Meaning / Purpose 18(72)
 - A. Having a Direction / Purpose 9(36)
 - 1. Being committed to something / having a direction / purpose 9(36)
 - B. Allegiance to a Cause / Principle 11(44)
 - 1. Pursuing a "higher sense of happiness" (i.e. beyond immediate pleasure) 1(4)
 - 2. Being part of a tradition, something larger than myself / something successful 6(24)
 - 3. Devotion to a team / cause 7(28)
 - C. Apotheosis / Immortality Strivings 5(20)
 - 1. Leaving my mark / being remembered 5(20)
- V. Self-Actualization 23(92)
 - A. Growth / Achievement Orientation 14(56)
 - 1. Having and pursuing challenges / goals per se 8(32)
 - 2. Having incremental goals (in their own right) 2(8)
 - 3. Pushing my limits / reaching my potential 7(28)
 - B. Inspiration from Role Models 9(36)
 - 1. Inspired by idols / role models 8(32)
 - 2. Inspired / encouraged by teammates (i.e. motivational climate) 3(12)
 - C. Inspiration from Achieving Success 17(68)
 - 1. Wanting to build on previous success / improvement 15(60)
 - 2. Repeatedly setting and meeting goals / repeatedly achieving 8(32)

Transformation

- II. Identity Forming 23(92)
 - A. Self-Defining / Image Building 9(36)
 - 1. I define myself by this activity 2(8)
 - 2. I identify with the team / it's my team 2(8)
 - 3. Promotes "he-man" image / image building 2(8)
 - 4. Becomes a way of life / lifestyle 6(24)
 - B. High Self-Esteem 21(84)
 - 1. Pride from overcoming challenges / being successful 6(24)
 - 2. Pride from working hard and performing to my potential 1(4)
 - 3. Improved self-esteem / pride from being in shape 7(28)
 - 4. Feeling special / superior / proud 20(80)
 - C. Self-Efficacy / Confidence 16(64)
 - 1. It's what I do best; being good at something 3(12)
 - 2. Increased self-efficacy / confidence 16(64)
 - D. Influence from Role Models / Mentors 5(20)
 - 1. Influenced / shaped by coach / role models 3(12)
 - 2. Emulating role models, peers 5(20)
 - 3. Guidance / mentoring from parents 1(4)
 - E. Internal Locus of Control / Agency 3(12)
 - 1. Sense of autonomy / control over my life 1(4)
 - 2. Internal attributions for success / outcome 2(8)
 - F. Membership / Citizenship 6(24)
 - 1. Belonging / being accepted to a community / team 4(16)
 - 2. Patriotism / school pride 3(12)
- III. Character Building 18(72)
 - A. Developing Prosocial Attitudes and Values 8(32)
 - 1. Respect for opponents / less skilled athletes / people in general 1(4)
 - 2. Positive social influences / peers 5(20)
 - 3. Learning about humility 3(12)
 - 4. Learning the value of friendship 2(8)
 - 5. Learning to value health and fitness 1(4)
 - B. Healthy, Prosocial Living Habits 17(68)
 - 1. Healthy, active lifestyle 6(24)
 - 2. Being in shape / healthy / feelings of vitality 14(56)
 - 3. Staying out of trouble 5(20)
- IV. Leadership / Achievement Skills 23(92)
 - A. Technical / Organizational Skills 9(36)
 - 1. Time management / organizational skills 9(36)
 - 2. Being resourceful / asking for help 1(4)

- B. Emotional Intelligence 22(88)
 - 1. Motivational Skills 17(68)
 - a) High expectations of myself 1(4)
 - b) Goal-setting, initiative, drive 3(12)
 - c) Work ethic 6(24)
 - d) Learning about commitment, reliability and responsibility 1(4)
 - e) Learning about discipline / dedication 4(16)
 - f) High expectations of others 1(4)
 - g) Competitiveness 1(4)
 - h) A general desire to excel / do my best 5(20)
 - i) Developing courage 2(8)
 - 2. Social Skill / Management Qualities 10(40)
 - a) Becoming a leader / mentor for junior players 3(12)
 - b) Learning teamwork / people skills 5(20)
 - c) Learning communication skills 3(12)
 - d) Developing social skills / social facility 4(16)
 - 3. Self-Awareness 2(8)
 - a) Developing personal insight 2(8)
 - 4. Empathy 1(4)
 - a) Learning to read / accommodate to others 1(4)

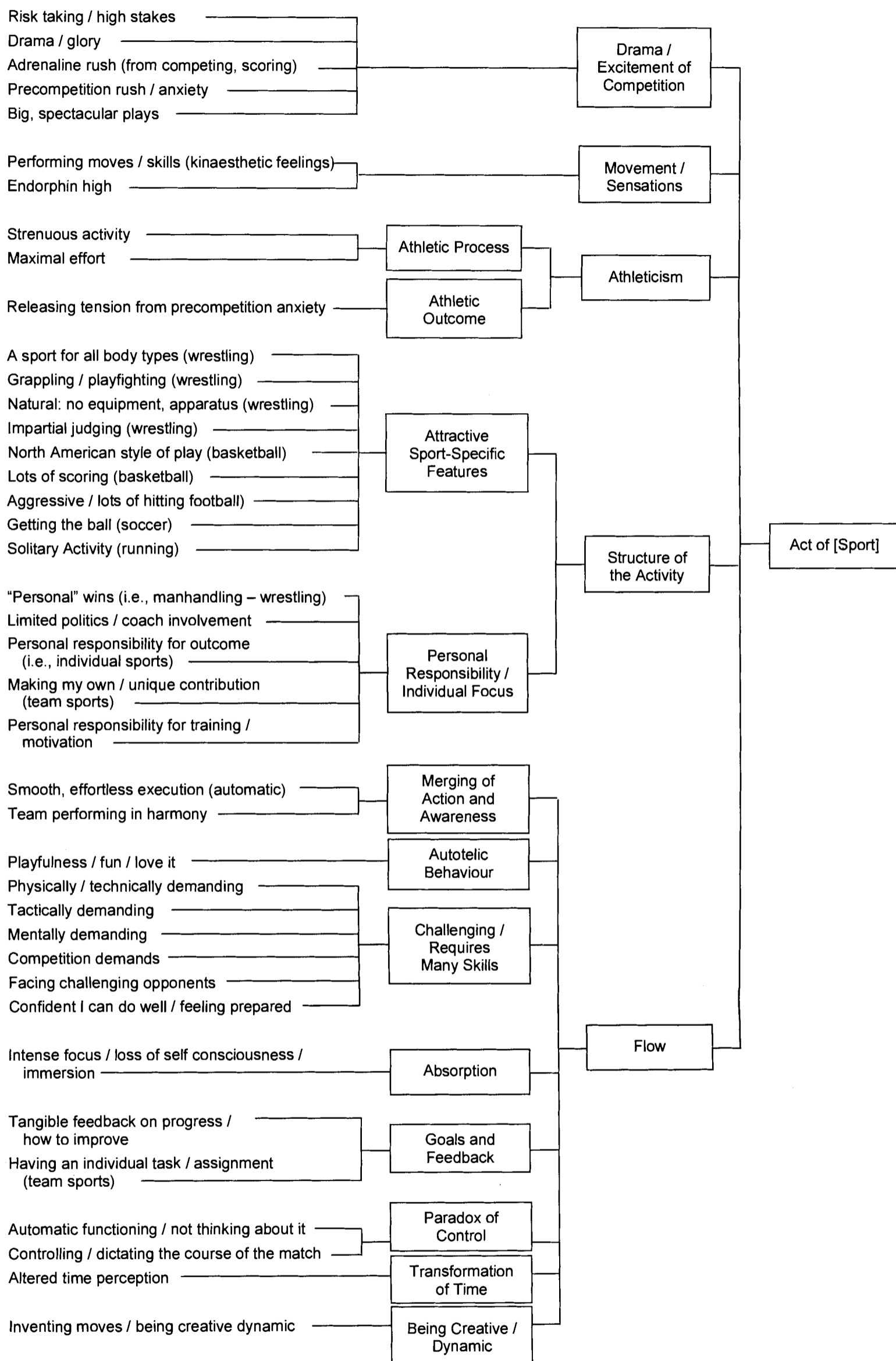
- V. Growth / Complexity 15(60)
 - A. Maturity-Immaturity Balance 4(16)
 - 1. Developing maturity 2(8)
 - 2. Remaining childish 2(8)
 - B. Positive / Sophisticated Worldview 6(24)
 - 1. Learning to enjoy life / have fun 2(8)
 - 2. Adversity enabled me to appreciate the "little things" in life 1(4)
 - 3. Positive attitude/ keeping things in perspective 4(16)
 - 4. Becoming worldly 1(4)
 - C. Hardiness / Resilience / Discipline 13(52)
 - 1. Mental toughness / increased tolerance for hardship and adversity 11(44)
 - 2. Self-control / delay of gratification 4(16)
 - 3. Improved stress tolerance 2(8)

- Adaptive Functioning 21(84)
 - I. Emotional Congruence 14(56)
 - A. I'm competitive by nature 6(24)
 - B. I'm a solitary person 1(4)
 - C. I like routine, order, structure 3(12)
 - D. Ego invested in winning, being good 3(12)
 - E. Desire for distinction (i.e. to be seen as better than others) 1(4)
 - F. Desire to demonstrate competence 3(12)
 - G. Allows me to express my inherent nonconformity / uniqueness 1(4)
 - H. Satisfies my need for achievement 1(4)

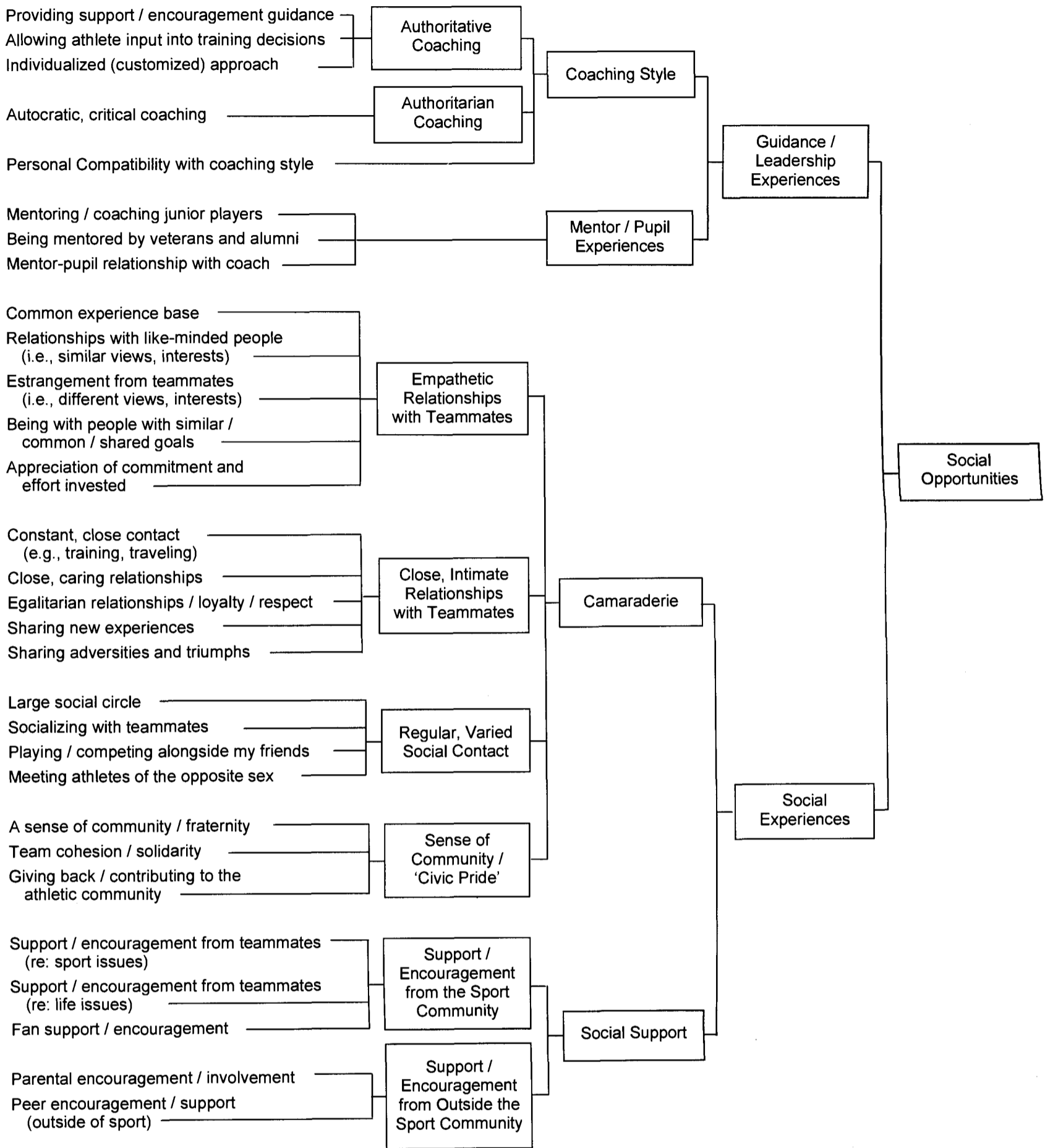
- II. Coping Through Sport 15(60)
 - A. Releasing tension / catharsis / calming / stress relief 9(36)
 - B. Mood regulating / mood enhancing 6(24)
 - C. "Cleansing" activity / freeing 2(8)
 - D. Distraction from daily life problems 3(12)

- III. Harmony in Living 4(16)
 - A. Satisfaction from intrinsic / personally relevant achievements 1(4)
 - B. Putting it all together / harmony in living 3(12)

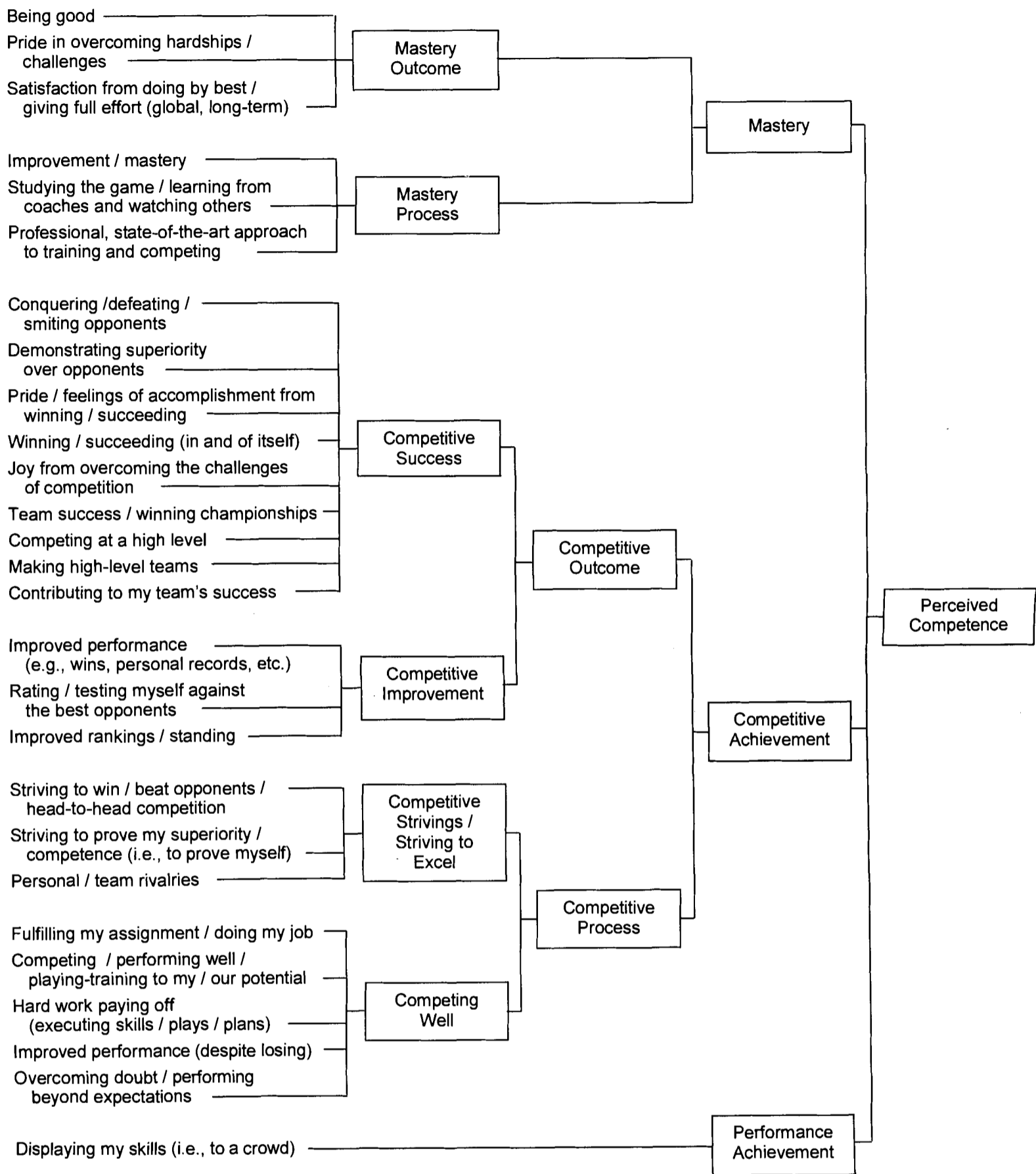
D1: Enjoyment: Act of [Sport]



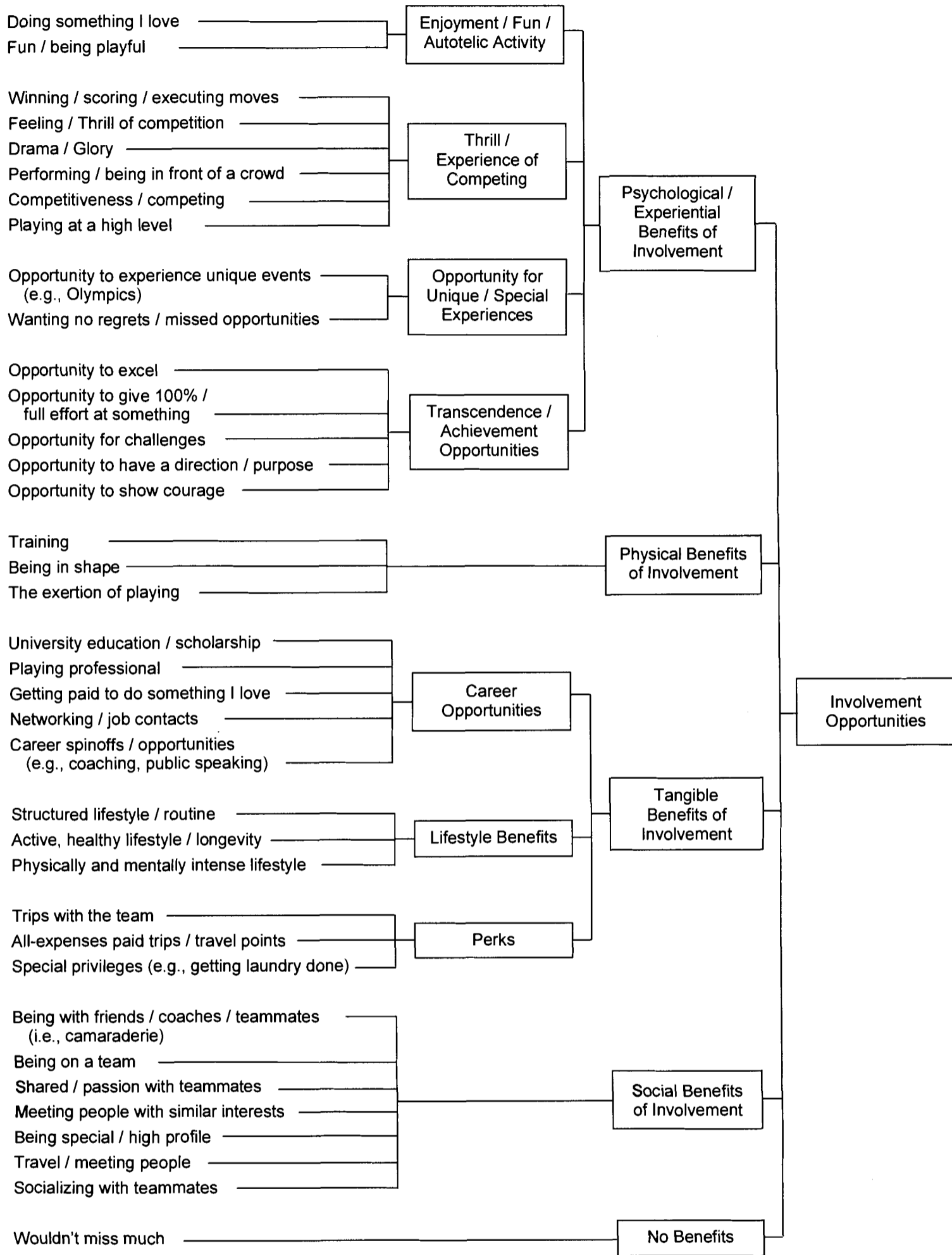
D2: Enjoyment: Social Opportunities



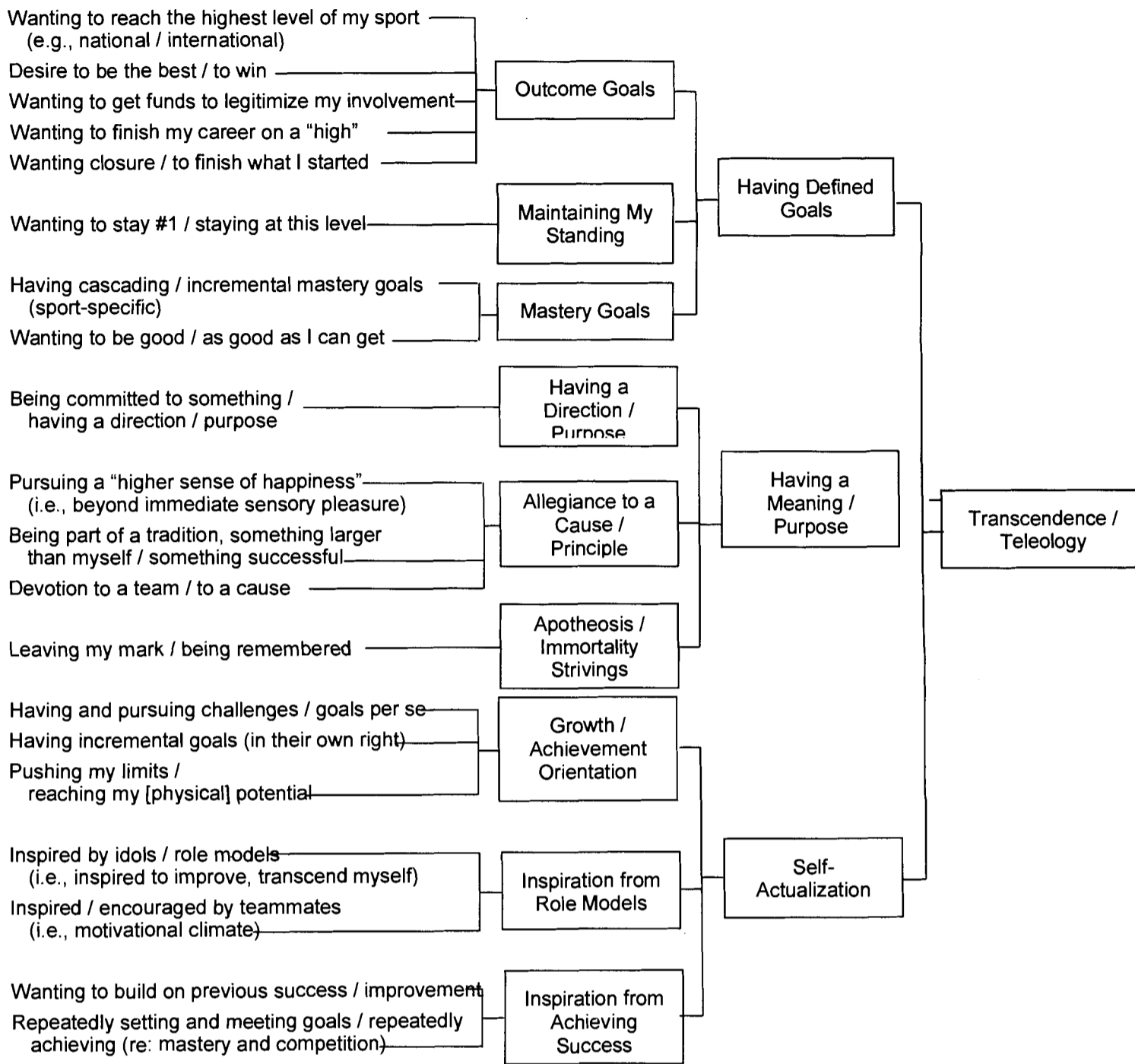
D3: Enjoyment: Perceived Competence



D4: Involvement Opportunities



D5: Transcendence / Teleology



D6: Transformation

