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University of Alberta

Enjoyment-Profiling: A Program with Youth Hockey Players

by

Bruce Andrew Pinel

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of

Master of Arts

Faculty of Physical Education and Recreation

Edmonton, Alberta

Spring 1996

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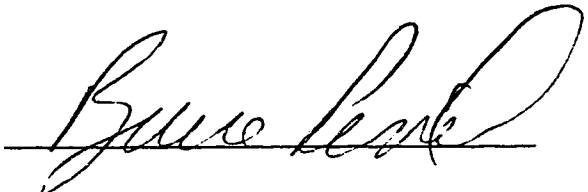

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled **Enjoyment-profiling: A Program with Youth Hockey Players** submitted by **Bruce Andrew Pinel** in partial fulfillment of the requirements for the degree of **Master of Arts**.

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Dedication

To Julie for all her encouragement, faith, friendship, and love; and to my parents, Helen and John, thank you for everything.

Abstract

The main purpose of this research was to introduce and assess the applicability and effectiveness of an enjoyment based cognitive-behavioral self-awareness program called *Enjoyment-profiling*. A combination of quantitative and qualitative research methods were used to assess the program as it was applied with 117 youth hockey participants in a summer hockey school, who were matched on age and playing experience with 113 control subjects from a related hockey school. The *Enjoyment-profiling* process allowed participants to generate, identify, and rate (on importance) personal sources of enjoyment through self- and group-awareness activities. *Enjoyment-profiling* is both idiographic, as participants generate their own sources of enjoyment, and nomothetic, as they then rate the importance of each source listed. Statistical analysis revealed (i) a significant interaction for sport enjoyment by time, $F(1, 211) = 8.08$, $p < .01$, where the experimental group's scores tended to increase while the control group's scores tended to decrease; (ii) a significant interaction for sport enjoyment by age by time, $F(3, 209) = 4.00$, $p < .01$, where both the experimental-young and -old group's scores tended to increase while the control-old group's scores tended to decrease and (iii) a significant interaction for sport commitment by time, $F(1, 211) = 4.36$, $p < .05$ where the experimental group's scores tended to increase while the control group's score remained unchanged. In addition, through hermeneutic interpretation of the participant' *enjoyment-profiles*, seven themes for sources of enjoyment emerged: (i) mastery processes (ii) effort and commitment factors, (iii) aesthetic rewards and sensations, (iv) achievement outcomes, (v) pressured achievement situations, (vi) basic skills performance, and (vii) aggressive / intimidating behaviours. The results of this study suggest that *Enjoyment*

profiling is to some extent an effective program for enhancing sport enjoyment, sport commitment, and awareness of enjoyment sources, and it highlights the need for more sport specific qualitative research on youth sport enjoyment.

Acknowledgements

I would like to thank my supervisor, Dr. Wendy Rodgers, for all of her support, encouragement, and guidance throughout my program. I would also like to thank the members of my examining committee, Dr. John Hogg, Dr. Brian Nielsen, and Dr. Graham Fishburne, for their insight and support throughout this process.

A special thanks to my friends Pauline Poon, Richie Fletcher, and Mike Silk for their constant encouragement (Pauline), sarcasm and wit (Fletch), and fresh cups of tea (Silky). Thanks guys! You have done the little things that have helped make the graduate school experience what it is.

Finally, I would like to thank Len and Arlene Barrie for welcoming me into their 'family' at the Hockey College, and thanks to all the participants who made this research possible.

Table of Contents

List of Tables

Table

INTRODUCTION

It's Friday afternoon, school has just been let out and there is only 2 hours of daylight left. I rush down the street towards home thinking about the turnaround time- the time required for me to get home and drop off my school gear to when I turnaround and leave the house clad in my hockey gear and head to the outdoor rink at the top of my street. With my skates (and skate guards) already on, I slip and slide my way up the street full of anticipation. I use my stick for balance as I negotiate the snow, ice, and pavement that lines the route to the rink. I arrive ahead of the other kids, kick off my skate guards, pull the puck out of my jacket pocket and toss it on the ice knowing that I will have a few moments of uninhibited creativity- I can skate, shoot, stickhandle, and replay scenes from last week's Hockey Night in Canada television broadcast on CBC. The other kids start to arrive and the rink fills up with enthusiasts of all ages, sharing a collective conscious of playing hockey for the sake of playing hockey. Some days you shine and other days you go unnoticed, but regardless, at the end of the day you know you have worked hard and have felt the rush, excitement, challenge, comraderie, and the sensations that are inherent in hockey- and nobody can take that away from you.

I would love to give you a specific date or even a time period when this scenario occurred, but fortunately it happened routinely each winter for many winters, including this year's. This is hockey in its purest form- no league, no playoffs, no trophies, no winners or losers. The teams change as players come and go, no-one keeps score, everyone plays and the competition is fierce- not between teams but within each player

who is striving to do their best and to make the most of the experience. This is the innocence of hockey; the outdoor rink where every kid can enjoy the experience everyday and no one has to go home a loser.

Every winter, in addition to the outdoor rink hockey, I also participated in organized hockey on a team with sixteen other kids all striving to win, sometimes at the expense of having fun. Somewhere between the bitter cold of the outdoor rink and the flashing scoreboard of the local arena, our motives changed and society had forced upon us the necessity for finishing first, for being victorious, and for beating our opponents. Looking back, I was fortunate enough to have achieved reasonable successes in organized hockey, having received numerous trophies and medals over the years, but somewhere along this journey I lost interest. I no longer enjoyed the experience and stopped playing the game I had grown to love. In retrospect, I realize that I would never have reached my 'organized hockey' successes had I not loved the game itself, for itself. The sheer enjoyment and intrinsic motivation that kept me out on the rink after the street lights came on, knowing I would be scolded again for being late for dinner, is what provided a means for achieving my 'organized hockey' successes. Somehow I forgot about these values and got sucked into the world of the "it's not worth playing if you can't win" attitude that has prematurely ended so many youth's hockey experiences. I recognize the effect winning has on enjoyment, there is an obvious positive relationship, but unfortunately not everyone can play organized hockey and win all the time, not even the very best players. I feel that there has to be a way to enhance the enjoyment and intrinsic motivation within organized hockey so that every youth has the opportunity to go home a 'winner' everyday, just as

they do on the outdoor rinks.

Purpose

The purpose of this research is to introduce and assess the effectiveness of a cognitive-behavioral self-awareness program called *Enjoyment-profiling*. Youth hockey players between the ages 6 to 15 experienced the program while attending a summer hockey school. *Enjoyment-profiling* encourages the participants to examine the various sources of enjoyment to their participation, while focussing primarily on the intrinsically motivating sources of enjoyment. The primary purposes of this study are (1) to quantitatively determine the effect *Enjoyment-profiling* has on participant's reported sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation; pre- and post-treatment; (2) to qualitatively determine the sources of enjoyment themes through hermeneutic interpretation of the participant's *enjoyment-profiles*; (3) to address the problem in the literature of inferring importance of sources of enjoyment on the basis of rank ordering by frequency; and (4) to qualitatively assess the program's design, delivery, and feasibility in a summer hockey camp setting.

Significance of Study

Motivation for participation in regular physical activity has emerged as an important research area. The escalating costs of health care for society, coupled with the recognition that many serious diseases and medical conditions of modern society are related to self-selected lifestyle factors, has brought forward the importance of preventive

health measures (Bouchard, Shephard, & Stephens, 1994). Physical activity is a preventive health measure that may provide individuals with positive health gains. If health gains are to be realized, an individual must sustain a level of activity that will produce the desired psychological, sociological, and physiologic[-1] effects. The present research relates to the enhancement of youth sport participation, focussing on participant enjoyment, with the Sport Commitment Model (SCM) (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993), the Sport Enjoyment Model (Scanlan & Lewthwaite, 1986; Scanlan & Simons, 1992), and the theory of Intrinsic Motivation (Deci, 1975; Deci & Ryan, 1980) providing the basis for interpretation. It is believed that increases in enjoyment and intrinsic motivation positively influence physical activity behaviour patterns by affecting sport commitment and behavioural intentions (e.g., Scanlan & Simons, 1992; Weiss, 1993; Freedson & Rowland, 1992; Sallis & McKenzie, 1991; Scanlan et al., 1993)

Minor sport coaches and administrators have typically been satisfied assuming that the large number of participants in youth sport programs indicates general satisfaction with the programs. Participation figures in of themselves do not address the quality of the experience (Wankel & Kreisel, 1985) but instead may reflect a lack of alternative program options for participants, the relative affordability of a program, or a high population to program ratio. However, research on the quality of participation in youth sports has yielded the robust finding that 'fun/enjoyment' is a predominant reason for participation (e.g., Fry, McClements, & Sefton, 1981; Gill, Gross, & Huddleston, 1983; Gould, Feltz, Weiss, & Petlichkoff, 1982; Sapp & Haubenstricker, 1978; Passer, 1982; Wankel & Kreisel, 1985). In addition to enjoyment being an important motive to participation, it is

also figures prominently in the termination of participation. Both the 'dropout' and 'burnout' literatures highlight the important role enjoyment plays on continued involvement in youth sports. Youth and elite sport athletes terminate their participation in sport programs when they do not feel enough fun or enjoyment is experienced (e.g., Gould & Horn, 1984; Klint & Weiss, 1986; Orlick, 1974). These studies indicate that enjoyment is an important participation motive in youth, adult, recreational, and elite sports. Although participation motives may change as an athlete progresses through various stages of participation, this research suggests that enjoyment is one motive that must remain intact if continued participation is desired. As well, Henschen (1993) and McCann (1995) indicate that athlete burnout prevention programs fundamentally involve addressing enjoyment, either in the preventive stages or in the treatment stages of this condition. These findings further stress the necessity of addressing the construct of enjoyment as it relates to sport commitment and long-term involvement, as the positive relationship between the constructs is robust. It follows that sport commitment and long-term involvement may positively effect the desired psychological, sociological, and physiological health outcomes related to physical activity participation.

Sport Commitment

Recently, the enjoyment-commitment relationship has been researched through the Sport Commitmer Model (SCM), as proposed by Scanlan et al. (1993). The framework for the SCM comes from the general psychological commitment literature, particularly Kelly and Thibaut's (1978) Interdependence Theory, and Rusbult's (1980a) Investment

Model. The SCM research has identified a positive relationship between enjoyment and commitment, with the authors indicating the necessity of further research on the enjoyment construct and its characteristics. This research explores the possibility of enhancing sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation through the cognitive-behavioral self-awareness program called *Enjoyment-profiling*. The program focuses primarily on the intrinsically motivating sources of enjoyment, consistent with Deci and Ryan's (1980) theory of Intrinsic Motivation and Scanlan and Simon's (1992) Sport Enjoyment Model, as these sources of enjoyment have a reported positive effect on sport commitment (e.g., Scanlan et al., 1993; Weiss, 1993). As measuring actual behavioural sport commitment necessarily involves monitoring participation over a long period, this research measured the psychological construct of sport commitment, as proposed by the SCM, as well as the participant's behavioural intentions which are indicative of psychological commitment.

Sport Enjoyment

The sport enjoyment construct, as part of the SCM, is the basis of this program. Sport enjoyment is characterized by an individual's positive affective response to his or her sport experience which reflects generalized feelings and/or perceptions such as pleasure, liking, and fun (Scanlan & Lewthwaite, 1986). This definition of enjoyment is more specific than global positive affect, but is more general than specific emotions like anxiety or excitement, which influence enjoyment. Sport enjoyment has been shown to be an important participation motive in youth and elite sport (e.g., Fry et al., 1981; Scanlan &

Lewthwaite, 1986; Scanlan et al., 1989; Wankel & Sefton, 1989; Scanlan & Simons, 1992; Scanlan et al., 1993). As sport enjoyment is a central determinant of commitment in youth sports programs (Scanlan and Lewthwaite, 1986), a better understanding of sport participation will come from studying the sources of sport enjoyment as part of the total sport experience. Knowledge of what makes the sport experience enjoyable is key to understanding and enhancing motivation (Scanlan & Simons, 1992) and *Enjoyment-profiling* may facilitate this process.

Although research methods and designs have varied, studies relating to sport enjoyment have yielded consistent results that can be summarized by the four quadrants in the Sport Enjoyment Model, as proposed by Scanlan and Lewthwaite (1986), and Scanlan and Simons (1992). The Sport Enjoyment Model presents four general quadrants that encompass the possible sources of sport enjoyment: (1) achievement-intrinsic; (2) achievement-extrinsic; (3) non-achievement-intrinsic; and (4) non-achievement-extrinsic. It is important to realize that sport enjoyment can be derived from many different sources and in many different combinations, as this model indicates. Previous researchers (e.g., Csikszentmihalyi, 1975; Deci & Ryan, 1980) have often used enjoyment and intrinsic motivation synonymously, believing that enjoyment is determined solely from intrinsically motivating sources. The four categories of this model clearly indicate that sport enjoyment is much broader as participants may derive sport enjoyment from external sources as well. Recognizing the scope of the sport enjoyment construct, this research allows participants to identify the broad spectrum of sources, while focussing on those sources of enjoyment that are directly controlled (self-determined) by the participant. Thi

program is based on enhancing self-awareness; therefore, addressing the sources of enjoyment that are self-determined seems to be a logical starting point and is consistent with the conceptual basis of Intrinsic Motivation theory (Deci, 1975; Deci & Ryan, 1980). *Enjoyment-profiling* provides coaches, sport psychologists, and athletes with a program where participants examine and become aware of their sources of enjoyment in an effort to enhance their sport enjoyment and related sport commitment.

In designing research on sport enjoyment, Wankel and Kreisel (1985) acknowledged that careful consideration should be given to those aspects of sport which the participants as a whole most enjoy, and these aspects should be emphasized in the development and conduct of youth sport programs. As well, Wankel and Sefton (1989) indicated that fun is not merely a highly transient day-to-day phenomenon but is a considerably regular and predictable variable affecting participation. Therefore, justification in advocating certain leadership practices that are more likely to result in positive fun experiences for the majority of participants is warranted. The process of *Enjoyment-profiling* allows for individually generated, situationally specific, and personally controlled *enjoyment-profiles*, thereby addressing the considerations put forward by these researchers. In addition, the program allows for modifications based on the immediate and specific clientele needs, rather than being a static program based on previously documented clientele needs from unrelated populations.

When using an intervention with youth athletes it is necessary to consider age and developmental differences between participants. Wankel and Kreisel's (1985) study of factors underlying enjoyment in youth sports reported enjoyment factors that differed by

age for hockey players, thus supporting the age differences factor. *Enjoyment-profiling*'s flexibility and self-determined nature allows for these age differences to emerge while maintaining its conceptual framework and intent.

In summary, the sources of enjoyment have been documented (e.g., Sapp & Haubenstricker, 1978; Fry et al., 1981; Gill, Gross, & Huddleston, 1983; Gould, Feltz, Weiss, & Petlichkoff, 1982; Wankel & Kreisel, 1985; Wankel & Sefton, 1989; Scanlan & Lewthwaite, 1986); the positive enjoyment-commitment relationship has been supported (e.g., Scanlan & Lewthwaite, 1986; Scanlan & Simons, 1992; Scanlan et al., 1993); and the need for program modifications aimed at enhancing enjoyment has been acknowledged (e.g., Wankel & Kreisel, 1985; Scanlan & Simons, 1992; Weiss, 1993; Sallis & McKenzie, 1991). However, the literature to date has yet to provide any enjoyment enhancing interventions to meet this need. This research study assesses the effectiveness of an applied program designed to meet this need through cognitive-behavioural and self-awareness processes and activities.

Enjoyment-profiling

Based on the steps and procedures of performance-profiling described by Butler, Smith and Irwin (1993), Butler and Hardy (1992), Jones (1993), and Hogg (1995), *Enjoyment-profiling* was developed. *Enjoyment-profiling* is a self-awareness program that enables athletes to gain awareness of his or her own perceptions of the sources of enjoyment, while determining the importance of each in relation to his or her overall enjoyment. Kelly's (1955) Personal Construct Theory (PCT) postulates that individuals

strive to make sense of the world and themselves by constructing personal theories. This program is a natural application of PCT to sport psychology. Through the processes of *Enjoyment-profiling*, the athlete explores and communicates constructions of the self that, as Ravenette (1977) suggested about personal constructs, might otherwise remain at a low level of awareness and be taken for granted. Also, remaining consistent with Deci's (1975) and Deci and Ryan's (1985) theory of Intrinsic Motivation, *Enjoyment-profiling* encourages both self-determination and control. The individual generates his or her own *enjoyment-profile*, thus it is self-determined, which according to the theory is necessary for maintaining or increasing intrinsic motivation. In addition, *Enjoyment-profiling* focuses on those sources that are directly under the individual's control, thereby satisfying the requirement for personal control in enhancing intrinsic motivation and enjoyment.

Strengths and contributions of this research

The strengths of this research are many. First, it occurred in an actual field setting that is common to hockey and other sports, thereby increasing the ecological validity of the study. Second, it tests the relatively new SCM and Sport Enjoyment Model in an applied context, therefore extending the research on these models. Third, it provides information concerning a program that may potentially be applicable across many sports and many levels of participation, thereby reaching populations largely excluded from the use of mental skills training. Fourth, it extends the current literature on sport enjoyment by providing nomothetic and idiographic data through the combination of quantitative and qualitative research methods. Fifth, it extends the current literature by examining the

importance of various sources of enjoyment to participation based on participant ratings that are neither rank order nor solely determined by frequency ratings, both of which are misrepresentative of importance in sport enjoyment. Finally, it heightened the awareness of one hundred and seventeen youth hockey players about the importance that enjoyment and intrinsic motivation have in relation to sport commitment. As each participant left the hockey school having been exposed to the *Enjoyment-profiling* program, they may transfer this knowledge into other sports and activities. By addressing enjoyment at the youth level, increases in enjoyment may positively affect sport commitment and be reflected in sustained involvement in physical activity, thus addressing the need for Canadians to adopt healthier lifestyle behaviours by making physical activity part of their daily lives. As outlined above, any research that has the potential of influencing adult physical activity behaviours by maximizing enjoyment and commitment should be a welcome addition to both the literature and society.

The purpose of this research is to introduce and assess the effectiveness of *Enjoyment-profiling*. The primary purposes of this study are (1) to quantitatively determine the effect *Enjoyment-profiling* has on participant's reported sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation following the treatment; (2) to qualitatively determine sources of enjoyment themes through hermeneutic interpretation of the participant's *enjoyment-profiles*; (3) to address the problem in the literature of inferring importance of sources of enjoyment on the basis of rank ordering by frequency; and (4) to qualitatively assess the program's design, delivery, and feasibility in a summer hockey camp setting.

Delimitations

1. The *Enjoyment-profiling* program was the independent variable.

2. Sport enjoyment as measured by the Athletes' Opinion Survey (Scanlan et al., 1993) was a dependent variable.

3. Sport commitment as measured by the Athletes' Opinion Survey (Scanlan et al., 1993) was a dependent variable.

4. Behavior intentions as measured by five behavioural intention statements that were added to the Athletes' Opinion Survey (Scanlan et al., 1993) was a dependent variable.

5. Intrinsic motivation as measured by the Intrinsic Motivation Inventory (Ryan, 1982; Plant & Ryan, 1985; Ryan, Mims, & Koestner, 1983) was a dependent variable.

6. The age and previous playing experience of the participants were used to determine the statistical similarity between the treatment groups.

7. The sex of the participant was not a consideration since over 98% of participants were male.

8. All the participants in this study registered and paid to attend the hockey schools and therefore the results of this study represent this population only.

Limitations

1. There were other staff interacting with the participants daily during the study. As a control measure, the staff members at the experimental hockey school were aware of the nature of this study. This limitation was unavoidable given the nature of the hockey (and other summer sports) schools.

2. The control group for this study was obtained from another hockey school that was owned and operated by the same management team. The control hockey school conducted the same on- and off-ice programs as the experimental school, except for the exclusion of *Enjoyment-profiling*. Given the nature of the hockey school and the potential validity threat of group by treatment interaction that would exist, using a control group from another hockey school was seen as the only logical alternative and is consistent with Cook and Campbell's (1979) concerns of obtaining appropriate control groups in field settings.

Definitions

Self-awareness is a conscious recognition of behaviour. This includes any attitudes, feelings or values that accompany specific behaviours (Hogg, 1995).

Sport Enjoyment is defined as a positive affective response to the sport experience that reflects generalized feelings such as pleasure, liking, and fun (Scanlan & Simons, 1992).

Sport Commitment is defined as a psychological construct representing the desire and resolve to continue sport participation (Scanlan & Simons, 1992).

Behavioural Intentions is defined as a psychological construct measuring the participant's intent to perform certain behaviours in the future.

Intrinsic Motivation is defined as those behaviours motivated by the underlying need for competence and self-determination, and performed with no apparent external contingency (Deci & Ryan, 1980).

LITERATURE REVIEW

Intrinsic Motivation

Intrinsic Motivation theory holds that the sense of efficacy of having done something with competence resulting in enjoyment, pleasure, ecstasy, and fun of physical exertion is intrinsically motivating (Deci, 1975). As well, Deci and Ryan (1980) said that individuals need to experience themselves as competent and self-determining, which provides intrinsic gratification and is prerequisite to psychological health. Deci (1975) said that enjoyment of an activity is based upon feelings of competence and self-determination arising from involvement in that activity. A relationship exists between the two major components of intrinsic motivation, with self-determination being the more fundamental component, for the attainment of competence must occur within the context of self-determination to be intrinsically rewarding (Deci, 1980). This consideration is incorporated into the design of the *Enjoyment-profiling* in that from the beginning the participants generate and determine the contents, importance, and application of the program, thus meeting the need for self-determination..

Enjoyment-profiling, self-awareness, and Personal Construct Theory

Enjoyment-profiling is a modification of the performance-profiling self-awareness intervention. To date there has been limited documentation in the literature concerning the theory and application of performance-profiling (Butler, Smith and Irwin, 1993; Butler

& Hardy, 1992; Jones, 1993; Hogg, 1995); however, each author attests its effectiveness as a self-awareness tool, either through anecdotal evidence or research findings. Performance-profiling was originally developed within the sport of amateur boxing and has since been applied by sport psychologists in a variety of sports including field hockey, athletics, archery, gymnastics, ice-skating, weight lifting, swimming, speed skating, cycling, football, judo, rowing, modern pentathlon, volleyball, and soccer. Its wide usage attests to its effectiveness and applicability, and Jones (1993) said that performance-profiling, and modifications of it, are valuable tools in delivering sport psychology services. *Enjoyment-profiling* is a modification of this tool, with the emphasis on performance enhancement being replaced by an emphasis on enjoyment enhancement. *Enjoyment-profiling* follows the same general procedures and steps of performance-profiling, as outlined by Butler et. al (1993), Butler and Smith (1992), Jones (1993), and Hogg (1995), and is an application of Kelly's (1955) Personal Construct Theory (PCT) in sport psychology. The fundamental postulate of Kelly's PCT is that: *a person's processes are psychologically channelized by the ways in which they anticipate events.* This implies "that a person is in business to understand his or her own nature and the nature of the world and to test that understanding in terms of how it guides them and enables them to see into the immediate and long term future" (Bannister & Fransella, 1980). Underlying the fundamental postulate is individuals continual detection of repeated themes in their making sense of the events that surround them; these themes are called constructs. PCT emphasizes the uniqueness of individuals in how situations are perceived and interpreted, what is considered important, and what is implied by particular construal of an event

(Butler & Hardy, 1992), thus reflecting the Individuality Corollary of PCT which states that *persons differ from each other in their construction of events* (Kelly, 1955). Ravenette (1977) suggested however that such construct systems are built up and maintained at a lower level of awareness so we must invite the individual to explore and communicate that which he or she is already taking for granted. Therefore, *Enjoyment-profiling* enables the athlete to become aware of the sources of enjoyment that may have been previously taken for granted and provides a medium for these sources to be communicated. By having the participant explore and communicate their perspectives, their awareness is enhanced and this enables the coach and sport psychologist to discern something about the participant's perspective (Butler & Hardy, 1992), thus reflecting the Sociality Corollary of PCT which states that *to the extent that one person construes the construction processes of another, he or she may play a role in a social process involving the other person* (Kelly, 1955). *Enjoyment-profiling* enables the athlete's construction of enjoyment to be understood by coaches, thus facilitating the development of more meaningful relationships and training programs that meet both the coaches and athlete's needs. A unique feature of the intervention is its ability to enable the participant to construct an analysis designed by his or her own identification of what is important and then to represent this analysis in his or her own words; therefore, being specific and unique to each participant. Consistent with performance-profiling, *Enjoyment-profiling* involves two basic procedures: (1) the athlete identifies the sources and variables which he or she perceives to constitute the fundamental qualities of enjoyment, and (2) the athlete rates the importance of each source of enjoyment as it relates to his or her overall enjoyment.

Despite the wide variety and application of sport psychology interventions, Boutcher and Rotella (1987) identified several common underlying principles and stages in these processes. The typical stages followed are: (i) the athlete and the sport psychologist negotiate the aims and objectives, (ii) the sport psychologist undertakes a subjective analysis of the requirements of the sport, (iii) the sport psychologist carries out an individual assessment of the athlete via questionnaires and interviews, (iv) the sport psychologist implements a brief educational program, (v) the sport psychologist trains the athlete in appropriate skills and techniques, and (vi) the success of the program is evaluated. Although the athlete is involved in the process they generally are forced to assume a relatively passive role in the decision-making process (Butler & Hardy, 1992). The process of *Enjoyment-profiling* keeps the participant active in the program, thus avoiding the common passive (non-self-determined) role that participants play in other programs and is congruent with the empowering philosophies and ideologies of psychological skills training programs (e.g., Gauron, 1984; Orlick, 1986, 1990).

Deci and Ryan's (1985) Cognitive Evaluation Theory states that "according to the locus of causality principle, externally controlled events are likely to weaken intrinsic motivation for engaging in psychological skills training and thereby lead to problems in adherence (Bull, 1991)", thus supporting the design of *Enjoyment-profiling*. As well, the program focuses solely on those sources of enjoyment directly under the control of the individual, as focussing on sources externally controlled would be futile and counter-productive. This program provides a degree of self-determination not always evident in some other approaches to mental skills training and sets up the necessary basis for

competence generating experiences, from which intrinsically rewarding results are more likely to be produced. Consistent with Cognitive Evaluation Theory, Snyder (1983) suggested that sport commitments determined primarily by extrinsic rewards, hence extrinsic motivation, are especially fragile to long-term commitment. Conversely, *Enjoyment-profiling's* attention to enjoyment and intrinsic rewards may lead to increases in sport enjoyment, intrinsic motivation and sport commitment. Scanlan et al.'s (1993) study of sport commitment in youth baseball players (girls n = 95, and boys n = 83) found sport enjoyment was both positively related to sport commitment ($r = .71$, $p < .0001$) and was a specific predictor of sport commitment ($\beta = .61$, $p < .0001$); thus affirming the link between sport enjoyment and the desire and intent to commit to sports participation.

Sport Commitment

Commitment is used as an indicator of the motivational force behind persistence and has a substantial theoretical and empirical tradition (e.g., Kelly, 1983; Rusbult, 1988; Kelly & Thibaut, 1978). Commitment constructs have been used widely to explain personal involvement across diverse domains and endeavors including work settings (e.g., Farrell & Rusbult, 1981; Rusbult & Farrell, 1983), platonic relationships (e.g., Rusbult, 1980b), romantic relationships (e.g., Duffy & Rusbult, 1986; Rusbult, 1980a, 1983; Rusbult, Johnson, & Morrow, 1986; Sabatelli & Cecil-Pigo, 1985; Sprecher, 1988; Swensen & Geir, 1985), and running (Carmack & Martens, 1979).

Social psychologists use the idea of commitment to describe a set of factors that explain why people continue involvement in relationships or activities and the concept has

been applied to the sport context via the Sport Commitment Model (SCM) (Scanlan et al., 1993). The SCM is based on the prior theoretical concepts of Kelly and Thibaut's (1978) Interdependence theory, and Rusbult's (1980a) Investment Model which specify the determinants of sport commitment to be the variables of attraction, alternatives, and restraining forces. The SCM has been modified and expanded to examine the specific nature of commitment in sport and proposes that sport commitment is a function of five variables, each with a proposed directional influence on sport commitment. The variables and directional influence are: (1) sport enjoyment (+ve), (2) involvement alternatives (-ve), (3) personal investments (+ve), (4) involvement opportunities (+ve), and (5) social constraints (-ve). In the SCM the attraction variable from previous research is represented by the *sport enjoyment* variable, as research has consistently shown enjoyment to be a major attraction variable for sports participation. The alternatives variable was incorporated into the model as *involvement alternatives*. The variable of restraining forces was broken down into three separate variables in the SCM in order to provide a clearer examination of their independent influence on sport commitment. The three restraining force variables in the SCM are: (a) *personal investments* in the activity, (b) the influence of social norms, called *social constraints*, and (c) continued participation opportunities called *involvement opportunities*.

Sport Enjoyment

The construct of sport enjoyment, as part of the SCM, is the fundamental construct in the *Enjoyment-profiling* program. Scanlan et al. (1993) concluded that

enjoyment is a central determinant of commitment in youth sport programs and that a better understanding of sport participation will come from further study of what variables make the sport experience more enjoyable. In addition, the definition of sport enjoyment focuses on the causal condition of the positive affective experience on an individual's sport commitment (Scanlan et al., 1993), which has been demonstrated to be an important motivator in youth and elite sport (e.g., Scanlan & Lewthwaite, 1986; Scanlan et al., 1989; Wankel & Sefton, 1989). According to Scanlan and Simons (1992), knowledge of what makes the sport experience enjoyable to the participant is key to understanding and enhancing motivation and this program allows participants to explore these sources and gain this knowledge. Scanlan and her colleagues (e.g., Scanlan et al., 1989; Scanlan & Simons, 1992; Scanlan & Lewthwaite, 1986) proposed the Sport Enjoyment Model for investigating the diverse sources of sport enjoyment. The construct of sport enjoyment can be incorporated into a two-dimensional model (achievement / nonachievement, and intrinsic / extrinsic) from which four quadrants of sources of enjoyment are created. Scanlan and Lewthwaite (1986, p. 33) described the four quadrants as follows:

> *Quadrant I (Achievement - Intrinsic)*: Sources of enjoyment that relate to personal perceptions of competence and control such as perceived ability and the attainment of mastery goals.
>
> *Quadrant II (Achievement - Extrinsic)*: Sources of enjoyment that relate to personal perceptions of competence and control that are derived from other people such as positive social evaluation and social recognition of sport achievement.
>
> *Quadrant III (Nonachievement - Intrinsic)*: Sources of enjoyment related to (a) physical activity and movement such as sensations, tension release, action, and exhilaration, and (b) competition such as excitement.

Quadrant IV (Nonachievement - Extrinsic): Sources of enjoyment related to non-performance aspects of sport such as affiliating with peers and having positive interactions with adults that revolve around mutually shared sport experience.

This model provides an expanded view of the enjoyment construct, relating to the totality of the sport experience. Consistent with Deci and Ryan's (1980) relationship between intrinsic motivation and enjoyment, this model reflects that perceptions of personal competence and self-determination are necessary conditions for intrinsic motivation and enjoyment. In addition, Csikszentmihalyi's (1975) concept of flow contends that personal perceptions of competence and self-determination need to exist for enjoyment to occur, although they do not necessarily need to be consciously perceived. Both Intrinsic Motivation theory (Deci & Ryan, 1980) and flow theory (Csikszentmihalyi, 1975) support the link between enjoyment, self-determination, and feelings of competence.

The sport experience incorporates (a) achievement and nonachievement sources of enjoyment, and (b) intrinsic and extrinsic sources of enjoyment. As this enjoyment model relates to the totality of the sport experience, it is clear that sources of enjoyment must be considered from a broader perspective than solely the intrinsically motivating ones if complete sport enjoyment awareness is intended. In the *Enjoyment-profiling* process, participants identify as many variables from the broad spectrum of enjoyment sources so to become aware of this construct's diversity. However, by completing the program, participants identify, focus on, and give meaning to the sources of enjoyment that are self-determined, thus fostering intrinsic motivation.

The following reviews of participation motives and sport enjoyment support the Sport Enjoyment Model created by Scanlan and her colleagues (e.g.,Scanlan et. al, 1989;

Scanlan & Simons, 1992; Scanlan & Lewthwaite, 1986).

Participation Motivation and Sport Enjoyment

Participation motives for youth sports have been thoroughly researched. From this literature, four major categories for classifying participation motives have emerged: (1) intrinsic rewards (fun, enjoyment, excitement, feeling good, getting fit, experiencing the skill, etc.), (2) extrinsic rewards (pleasing others, getting trophies, earning rewards, etc.), (3) social reciprocity (being with friends, being on a team, making new friends, etc.), and (4) achievement mastery (winning, playing well, beating an opponent, etc.). Other research on participation motives in youth sports, not using a category format, has produced results consistent with the above categories. Fry, McClements, and Sefton (1981) researched participation motives in youth hockey using a structured recall type questionnaire with 350 boys. The results revealed that having fun (29.5%), doing the skills (22.4%), winning or competition (11%), and being with friends (9%) were the most frequently cited motives for participation. In their investigation of motives to join a youth sports program for 11- to 18 year olds, Sapp and Haubenstricker's (1978) questionnaire study yielded similar results. The percentages of items identified as motives for participation, based on frequency of responses were: (93%) have fun; (80%) improve skills; (56%) to become fit; (55%) because friends played; (33%) to make new friends; (32%) parents wanted them to play; (18%) nothing else to do; and (10%) feel important. Using a 3-point Likert scale, Gould, Feltz, Weiss, and Petlichkoff (1982) found that the most important participation motives for a large number of competitive youth swimmers

were: fun, fitness, skill improvement, challenge, excitement, and team atmosphere. Gill, Gross, and Huddleston (1983) employed a similar Likert scale to assess participation motives in youth sports and found the most important motives were: improve skills, challenge, fun, competition, to be fit, and to learn new skills. Overall, one robust finding from this literature review is that enjoyment / fun is a predominant participation motive, therefore warranting specific research attention.

The youth sport enjoyment research has addressed the sources for enjoyment in the sporting environment and has produced consistent results. Wankel and Kreisel (1985) assessed the factors underlying enjoyment for youth (7- to 14 years old, n = 822) soccer, baseball, and hockey participants. The participants ranked a pre-determined list of sources of enjoyment for their particular sport and the researchers then categorized all the sources and identified three classifications: (1) Intrinsic or Process sources of enjoyment (comparing skills, excitement of the game, personal accomplishment, doing the skills, and improving the skills) received the highest ranking across the sample; (2) Social factors (being on the team and being with friends) was second in order of importance; and (3) Extrinsic or Product sources of enjoyment (winning, getting rewards, and pleasing others) received the lowest rank of importance. Although there was some deviation in the actual rankings of sources across sports and age groupings, the overall pattern was consistent and indicates that enjoyment was determined by many sources, both internal and external, for these participants.

The sport enjoyment studies reviewed above have produced categories of enjoyment sources that are very similar to the categories of participation motives identified

earlier, thus reinforcing the positive relationship between enjoyment and participation motives.

Two decades ago, Csikszentmihalyi (1975) questioned highschool basketball players (n = 40) about their reasons for enjoying their sport. The results were, in order of importance: (1) competition / measuring self against others; (2) development of personal skills; (3) friendship / companionship; (4) activity itself; (5) enjoyment of the experience / doing the skills; (6) measuring self against own ideals; (7) prestige / rewards / glamour; and (8) emotional release. Although labelled differently, these results are consistent with the sport enjoyment research previously mentioned. Although Csikszentmihalyi's (1975) theorizing and 'flow model' research has reinforced the purported link between enjoyment and intrinsic motivation, it has also clearly indicated that sources of enjoyment may be derived from external sources as well.

Consistent with the enjoyment-intrinsic motivation link, Chalip, Csikszentmihalyi, Kleiber, and Larson (1984) used Csikszentmihalyi's flow model to investigate enjoyment. Enjoyment was operationally defined as "a balance between the challenges of an activity and the skills of the participant." The results showed that across three different sport settings (organized, informal, and physical education class), situational enjoyment was associated with perceived challenge, thus supporting the flow model's relationship to intrinsic motivation and enjoyment. As well, Roberts and his colleague's (Roberts & Duda, 1984; Spink & Roberts, 1980) research has indicated that participation satisfaction was primarily related to demonstrating personal ability, thus supporting the intrinsic motivation relationship with enjoyment. In accordance with the previous results, Scanlan

and Lewthwaite's (1986) study on predictors of enjoyment for male youth wrestlers (n = 76) found that perception of ability was positively related to enjoyment ($F = 5.33$, $p<.024$). In a season-long investigation of fun in ringette and hockey, Wankel and Sefton (1989) used a pre- and post-game questionnaire to identify the best predictors of fun experienced (ringette girls n = 55, hockey boys n = 67). Multiple regression analysis identified that the best predictors of fun consisted of 'post-game rating of positive mood affect,' 'post-game report of how well one played,' and 'perceived challenge.' These three variables accounted for 53% of the variance in fun for ringette and hockey. In addition, Harris (1984) employed ethnographic techniques to assess the psychological concept of 'fun' with 10- 12 year old boys in organized baseball leagues. Fun was reported most often when players experienced (1) higher activity levels, and (2) greater control of action. The above research studies support the theoretical link between intrinsic motivation and enjoyment as they identify elements of self-determination and demonstration of competence in a positive relationship with enjoyment.

Brustad (1988), using Harter's (1981) Competence Motivation theory, examined sources of season-long enjoyment in a youth (ages 9- to 13 years) basketball league (boys n = 107, girls n = 100). He found that enjoyment was related to (1) higher degrees of challenge, consistent with Harter's theory, and (2) less parental pressure. However, perceived competence as measured in this study was not a significant predictor of enjoyment, therefore failing to support Deci and Ryan's (1980) theory of Intrinsic Motivation. The important conclusion from this study is that sources of enjoyment span a broad spectrum, from intrinsic to extrinsic, all of which may or may not be functioning in

the population under study.

Thus far the literature presented has focussed on participants in youth sports programs. Scanlan, Stein, and Ravizza (1989) moved away from this population and researched the sources of enjoyment in former elite figure skaters (n = 26). Extensive interviews produced detailed retrospective data, for which an inductive analysis was performed to reveal the sources of enjoyment. Five higher order themes emerged as sources of enjoyment with each higher order theme consisting of several lower order themes. The five higher order themes were (lower order themes in parentheses) in no order of importance: (1) Social and life opportunities (friendships, family and coach relationships, and opportunities gained from going to competitions and touring), (2) Perceived competence (mastery, competitive achievement, performance achievement, and demonstration of ability), (3) Social recognition of competence (achievement recognition and performance recognition), (4) Act of skating (movement and sensation of skating, self-expression / creativity, athleticism, and flow / peak experiences), and (5) Special cases (sense of specialness and coping through skating). The Special cases theme was unique to this study. Previous sources of enjoyment literature has not revealed this grouping, possibly because the participants in youth sports have not had enough experiences or opportunities through sports to realize this as a source of enjoyment, but nonetheless were included in the questionnaire for this study as an exploratory measure. The former elite figure skaters based the lower order theme of 'sense of specialness' on their perceptions of being exceptionally talented and having abilities beyond the ordinary. The other lower order theme of 'coping through skating' reflects the figure skater's use of the sport itself as

a coping mechanism for dealing with life problems and gaining a sense of self-control.

Returning to the two-dimensional Sport Enjoyment Model proposed by Scanlan and her colleagues (Scanlan et. al, 1989, Scanlan & Simons, 1992; Scanlan & Lewthwaite, 1986), the sources of enjoyment presented in the above review of literature can be summarized and categorized into one of the four quadrants of the model. The model's four quadrants represent a combination of two dimensions; (i) intrinsic - extrinsic, and (ii) achievement - nonachievement, therefore providing a basis for interpreting and understanding the broad spectrum of enjoyment sources that have been thus far presented in the literature. Although these four quadrants may not be inclusive, they do provide a clear taxonomy of the sources of enjoyment in youth sports. Overall, the reviewed research (e.g., Wankel & Kreisel, 1985; Scanlan and Lewthwaite, 1986; Wankel and Sefton, 1989; Scanlan et al., 1989; Chalip et al., 1984; Harris, 1984; Brustad, 1988; Csikszentmihalyi, 1975; Roberts & Duda, 1984; Spink & Roberts, 1980) supports the conclusion that the sources of enjoyment included in the 'achievement - intrinsic' and 'nonachievement - intrinsic' quadrants have emerged as the two most salient and consistent categories of sources of enjoyment. This is an important realization to make because although the sources for enjoyment are many, the most salient ones relate to sources that are in whole, or part, under the direct control of the individual. Intrinsic Motivation theory (Deci, 1975; Deci & Ryan, 1980) provides a theoretical basis for explaining this finding by stressing the significance of perceptions of competence and self-determination in determining sport enjoyment and sport commitment. *Enjoyment-profiling* incorporates the above conclusions in its design and provides coaches, sport psychologists, and athletes

from all levels, an opportunity to gain awareness of the sources of enjoyment in the sport experience through the simple cognitive-behavioral self-awareness processes of the program.

It follows that *Enjoyment-profiling* may increase reported levels of sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation for the participants in this study.

METHODS AND PROCEDURES

Participants

The sample consisted of youths between the ages of 6 to 15 who had enrolled in summer hockey school. The school was an intensive one week on-ice/off-ice hockey training program (5 days/week, 8 hours/day). One hundred and seventeen experimental subjects and one hundred and thirteen control subjects representing a wide range of age and previous hockey experience participated in this study. All participants of the experimental hockey school were exposed to the *Enjoyment-profiling* program and only a few were not included in the analysis due to missing data. Informed consent (Appendix A) was obtained from the parents/guardians after the volunteer withdrawal procedures, guarantee of anonymity and confidentiality of information in the study was explained in full to the participants.

Instrumentation

A modified hockey specific version of the Athletes' Opinion Survey (Scanlan et al., 1993) (Appendix B) was used to measure the dependent variables of sport enjoyment, sport commitment and behavioural intentions (see Table 1 for items on the scale). The scales for the sport enjoyment and sport commitment constructs have demonstrated strong alpha reliability coefficients, .94 and .85, respectively, in previous research using these measures (Scanlan et al., 1993). A modified hockey specific version of the Intrinsic Motivation Inventory (Ryan, 1982; Plant & Ryan, 1985; Ryan, Mims, & Koestner, 1983) (Appendix C) was used to measure the dependent variable of intrinsic motivation. Alpha reliability coefficients for the subscales and the overall Intrinsic Motivation Inventory have been quite adequate in previous research, ranging from .68 for the pressure-tension subscale to .87 for the perceived competence subscale, with overall alpha coefficient for the inventory being .85 (McAuley, Duncan, & Tammen, 1989).

Measurement of age and hockey playing experience was collected from the demographic section at the start of the Athletes' Opinion Survey.

The *enjoyment-profiles* (Appendix D) were used to collect the data regarding the sources of enjoyment themes.

Table 1

Scale items for the sport enjoyment, sport commitment, and behavioural intentions constructs.

Sport Enjoyment
1. Do you enjoy playing hockey?
2. Are you happy playing hockey?
3. Do you have fun playing hockey?
4. Do you like playing hockey?
(Foils: 1 = not at all, to 5 = very much)

Sport Commitment
1. How dedicated are you to playing hockey?
2. How determined are you to keep playing hockey?
3. How hard would it be for you to quit hockey?
(Foils: 1 = not at all, to 5 = very much)
4. What would you be willing to do to keep playing hockey?
(Foils: 1 = nothing at all, to 5 = a lot of things)

Behavioural Intentions
1. I intend to play hockey this season.
2. I intend to go to all my games this season.
3. I intend to go to all my practices this season.
4. I intend to practice my skills outside of regular practice / game times this season.
5. I intend to participate in additional hockey clinics and schools this season.
(Foils: 1 = not at all, to 5 = very much)

Design

This study used a combination of quantitative and qualitative methods.

Quantitative methods

A quasi-experimental design with repeated measures within/between subjects was used.

The within subjects comparisons were the dependent variables (sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation), pre- and post-treatment. The between subjects comparisons were the treatment variable (*Enjoyment-profiling*) and group demographics (age and playing experience). A control group from another hockey school was used to compare the treatment effect on the four dependent variables. The control school was managed by the same hockey school organization, only in a different city with different staff. Cook and Campbell (1979) identified the difficulty in obtaining appropriate control groups in field settings given the nature of field research. They also stated that withholding treatments is often serious and difficult to resolve, as it seems ethically questionable if potentially beneficial treatments are withheld from persons who might need or deserve them. Given the nature of this hockey school, and the potential validity threat of a group by treatment interaction, the use of a control group as described above was seen as the most appropriate alternative for this research. The control group matched the experimental group in experience, age, on-ice activities, and off-ice activities, except for the *Enjoyment-profiling* program.

Qualitative methods

In order to interpret the sources of enjoyment and their respective importance to participation as it is understood by the youth hockey players engaged in the *Enjoyment-profiling* program, a qualitative methodology was required. Qualitative methodologies are founded on the belief that reality is multiple, constructed, and holistic (Lincoln & Guba, 1985). Assuming this belief about reality, it follows that the participants involved in

this study did not necessarily have identical understandings of the constructs being researched due to their diverse life experiences so the methods of this study account for this diversity. In order to present an holistic interpretation, qualitative research is inherently multimethod in focus (Brewer & Hunter, 1989) as cited in Denzin & Lincoln (1994). The use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question. This triangulation is not a tool or strategy of validation, but an alternative to validation that adds rigor, breadth, and depth to any investigation (Denzin & Lincoln, 1994). The multiple methods used in this study for qualitative data collection were: (1) the written responses of the participants on their *enjoyment-profiles*; (2) the researcher's field notes of observations on the participants and the program; and (3) the researcher's field notes of conversations with participants and parents. In addition, Lincoln and Guba (1985) elude to the researcher's need to provide a 'reasonable construction' of the data as another alternative to validity in order to strengthen the investigation. A 'reasonable construction' is one that might be made subsequently by another researcher reviewing the data. For this research study, another investigator (my supervisor) analyzed and interpreted the data so to test the 'reasonable construction' of the findings presented.

Variables

The dependent variables were sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation. The independent variable was the *Enjoyment-profiling* program.

Procedure

The research and program was explained in full to the camp director three months prior to the start of the hockey school. The research proposal was then given to the camp director and the recreation facility manager to ensure a mutual understanding of the proposed research. Prior to the start of the hockey school, I met with the other head instructors and explained the theory, purpose, and methods of the program and answered any questions they had regarding the research. On the first day of camp, for both the experimental and control groups, all of the parents and participants received the informed consent and the volunteer withdrawal procedure, guarantee of anonymity and confidentiality, and purpose of the research were explained in full. In addition, I explained that this program was part of the hockey school's overall program and that every participant will be exposed to it, so withdrawal from the study simply meant that the pre- and post-treatment questionnaires would not be completed. In total, no one declined or withdrew from particpating and only five participants had incomplete data sets due being absences.

The procedures of the *...yment-profiling* program are outlined below.

Day 1 (off-ice)

1st 45 minute session

1. Introduced myself and the research study.

-Read through informed consent form with the participants and explained the volunteer withdrawal procedures, guarantee of anonymity and confidentiality of information.

2. Participants completed the Athletes' Opinion Survey and Intrinsic Motivation Inventory. For the younger group, the questions were read aloud so that those experiencing difficulty in reading would not be excluded.

3. Introduced the specifics of the program and my expectations.

-Honesty and accurateness when responding to inventories is needed as there are no right or wrong answers.

-The success of your program depends on your effort and participation, as well as indicating what you think, not what you think I want you to think.

4. Defined self-awareness, sport enjoyment, sport commitment, and intrinsic motivation.

5. Discussed the importance of fun/enjoyment to continued participation and outlined its relationship with commitment, practice, and performance.

6. Individuals created a list of enjoyment variables based on their present and previous experiences, and recorded them in Column A of their *enjoyment-profile* (Appendix D).

7. Requested players to continue thinking about their enjoyment variables during the next on-ice session so that they might possibly expand their list in the afternoon session.

<u>2nd 45 minute session</u>

1. Individuals added or modified their list of enjoyment variables following their on-ice session.

2. In large group we brainstormed, discussed, and recorded all of the variables contributing to enjoyment on the blackboard.

3. From the list on the blackboard, individuals selected the most important sources of enjoyment to their overall enjoyment in hockey. They selected as many or as few as they

wished and recorded them in Column B of their *enjoyment-profile*.

4. Individuals rated (between 1-10) the importance of each source of enjoyment to their overall enjoyment and recorded these ratings in Column C of their *enjoyment-profile*.

5. As a group we discussed and identified the sources of enjoyment (from the list on the blackboard) that are self-determined. From this, participants identified the self-determined sources of enjoyment in Column B (the most important sources column) of their *enjoyment-profile*.

6. Individuals identified the 2 most important sources of enjoyment that were self-determined and recorded these in Spaces D & E on their *enjoyment-profiles*. These variables were used for the on-ice portion of the program.

7. As a group we discussed the relevance of identifying physical cues that would serve to remind participants of their 2 most important sources of enjoyment. Individuals identified a salient and easy to remember physical cue that was representative of the respective source of enjoyment and recorded them in brackets below Spaces D & E, respectively.

8. Reminded them that I would be asking them about their 2 important sources of enjoyment and respective physical cues the next time we were on the ice together.

Day 2 (on-ice)

<u>1st session (incorporated into existing drills and other on-ice activities)</u>

1. Frequently asked participants to recall their 2 important sources of enjoyment and to become aware of their physical cues. In addition, the other instructors made efforts to do

the same.

2nd session (incorporated into existing drills and other on-ice activities)

1. Repeat above step.

Day 3 (on- and off-ice)

1st 45 minute session (off-ice)

1. As a group we discussed the effectiveness of yesterday's on-ice activities.

2. Introduced Deci & Ryan's (1980) theory of Intrinsic Motivation and elaborated on the components of self-determination and demonstration of competence as they relate to sport enjoyment.

3. Presented a story about an old man who enjoyed listening to the children play road hockey outside of his house, so he started to pay them until gradually he ran out of money. Talked about the shift from intrinsic motivation to extrinsic motivation for the children in the story.

4. Let participants tell stories of their hockey experiences and as a group analyzed the stories for intrinsic vs. extrinsic value.

5. Encouraged the participants to continue attending to the physical cues and respective sources of enjoyment in their next on-ice session.

2nd session (on-ice)

1. Frequently asked participants to recall their 2 important sources of enjoyment and to become aware of their physical cues. In addition, the other instructors made efforts to do the same.

Day 4 (on-ice)

1. Repeated the steps of Day 2

Day 5 (on- and off-ice)

1st 45 minute session (off-ice)

1. As a group we discussed any concerns, successes, failures, strategies used, and effectiveness of the on-ice activities.

2. Participants completed the Athletes' Opinion Survey and Intrinsic Motivation Inventory. For the younger group, the questions were read aloud so that those experiencing difficulty in reading would not be excluded.

3. As a group we discussed the purpose of the study and the importance of using the information learned through the program in their upcoming hockey season. We re-discussed the relationship between intrinsic motivation and enjoyment, as well as their relationship to sport commitment, practice, and performance.

2nd session (on-ice scrimmage for 2 hours)

1. Frequently asked participants to recall their 2 important sources of enjoyment and to become aware of their physical cues. In addition, the other instructors made efforts to do the same.

Data analysis

Statistical procedures

First, one-way analysis of variance (ANOVA) was used to determine any demographical statistical significance between the young groups (experimental and control) and the old groups (experimental and control) on the variables of age and previous hockey experience. Second, a series of 2 X 2 within subjects factorial ANOVA's were performed to examine the possibility of a general age effect on the four dependent variables; that is, to examine if any of the changes over time were simply due to being either young or old, regardless of treatment condition. The two factors were: (a) Age (experimental and control young; and experimental and control old); and (b) Time (pre- and post-treatment dependent variable scores); with repeated measures on the second factor. Third, a series of within subjects factorial ANOVA's with repeated measures on the dependent variables were used to determine any statistically significant changes between (1) the treatment conditions, after collapsing the age groups within each, as well as between (2) the four conditions: experimental-young, experimental-old, control-young, and control-old.

Qualitative procedures

Goetz and Lecompte (1981) described four dimensions along which analytic strategies may be arrayed. The qualitative portion of this study could be defined along those dimensions as being inductive-generative-constructive-subjective, representing a

more naturalistic paradigm for processing data. This research followed the general data processing aspects of Glaser and Strauss' (1967) constant comparative method, as cited in Lincoln and Guba (1985, pp. 333-356), with particular emphasis on the unitizing and categorizing tasks of data processing identified within this method. For unitizing data, Lincoln and Guba (1985, pp. 344-345) described that the units of information that serve as the basis for defining categories should have two characteristics. First, it should be heuristic, that is, it should convey meaning to the researcher. Second, it must be the smallest piece of information that can stand by itself and be interpretable in the absence of any additional information other than the broad understanding of the context in which the research is carried out. For categorizing data, Goetz and Lecompte (1981, p. 58) describe this process as:

> This strategy [constant comparative method] combines inductive category coding with a simultaneous comparison of all social [enjoyment] incidents observed. As social [enjoyment] phenomena are recorded and classified, they also are compared across categories. Thus, the discovery of relationships, that is, hypothesis generation, begins with the analysis of the initial observations, undergoes continuous refinement throughout the data collection and analysis process, and continuously feeds back into the process of category coding. As events [sources of enjoyment] are constantly compared with previous events [sources of enjoyment], new typological dimensions, as well as new relationships, may be discovered.

RESULTS

The results are presented in two parts. Part I presents the statistical analysis of the four dependent variables (sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation) collected via the Athletes' Opinion Survey and Intrinsic Motivation Inventory. Part II presents the hermeneutic interpretation of the participant's *enjoyment-profiles* collected via the *Enjoyment-profiling* program.

Part I - Statistical Analysis

Table 2 represents the means and standard deviations of age and playing experience for the young (ages 6-9) and old (ages 10-15) age categories within each treatment condition (experimental and control). One-way analysis of variance (ANOVA) revealed that no statistical differences existed between: (1) the experimental-young and control-young groups; or the (2) experimental-old and control-old groups for age or playing experience.

Table 2

Means and standard deviations of age (years) and playing experience (years) for the young (ages 6-9) and old (ages 10-15) age categories within the experimental and control conditions.

	Age (years)		Experience (years)	
Condition	M	SD	M	SD
Exp-young (n=69)	8.46	1.30	2.57	1.59
Con-young (n=26)	8.23	.76	3.12	1.53
Exp-old (n=57)	12.11	1.62	4.79	2.50
Con-old (n=97)	11.94	1.46	5.47	2.16

Before proceeding with the statistical analysis of the dependent variables, a series of 2 X 2 within subjects factorial ANOVA's were performed to examine the possibility of a general age effect on the four dependent variables; that is, to examine if any of the changes over time were simply due to being either young or old, regardless of treatment condition. The two factors were: (a) Age (experimental and control young; and experimental and control old); and (b) Time (pre- and post-treatment dependent variable scores); with repeated measures on the second factor. The results revealed no statistically significant

age effects on any of the dependent variables over time. Table 8 in Appendix E represents the means and standard deviations of the young (ages 6-9) and old (ages 10-15) participant's pre- and post-treatment scores for the four dependent variables (sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation).

Internal consistency for the sport commitment, sport enjoyment and behavioural intentions scales was assessed using Cronbach's (1951) coefficient alpha. Internal consistency for the above measures was generally quite adequate. In addition, good pre/post-test reliability was obtained. Alpha coefficients pre- and post-test for the above were: sport commitment (□=.71-pre, and .74-post), sport enjoyment (□=.81-pre, and .79-post), and behavioural intentions (□=.72-pre, and .67-post).

In order to examine the effects of the treatment (independent variable) on the four dependent variables, ANOVA's with repeated measures were used to determine statistically significant changes between (1) the four conditions: experimental-young, experimental-old, control-young, and control-old, as well as (2) the treatment conditions, after collapsing the age groups within each.

Sport Enjoyment

A 2 X 2 within subjects factorial ANOVA was performed to examine changes in participant's sport enjoyment scores from pre- to post-treatment. The two factors were: (a) Condition (experimental and control); and (b) Time (pre- and post-treatment sport commitment scores); with repeated measures on the second factor. The results revealed a significant interaction for sport enjoyment by time, $F(1, 211) = 8.08$, $p < .01$. The

experimental group's scores increased slightly, whereas the control group's scores decreased slightly, yielding a statistically significant interaction between pre- and post-treatment sport enjoyment scores.

To examine the existence of possible age effects based on the above finding, a 2 X 2 X 2 within subjects factorial ANOVA was performed to examine changes in participant's sport enjoyment scores from pre- to post-treatment. The three factors were: (a) Condition (experimental and control); (b) Age (young: ages 6-9, and old: ages 10-15); and (c) Time (pre- and post-treatment sport enjoyment scores); with repeated measures on the last factor. The results revealed a significant interaction for sport enjoyment by time, $F(3, 209) = 4.00$, $p < .01$. Post hoc analysis of variance revealed the source of the interaction for sport enjoyment by time was due to: (1) the experimental-old group's scores increased slightly, whereas the control-old group's scores decreased slightly, yielding a statistically significant interaction, $F(1, 131) = 10.67$, $p < .001$, between pre- and post-treatment sport enjoyment scores; and (2) the experimental-young group's scores increased slightly, whereas the control-old group's scores decreased slightly, yielding a statistically significant interaction, $F(1, 138) = 5.34$, $p < .022$, between pre- and post-treatment sport enjoyment scores. No other significant results were found for sport enjoyment. Table 3 represents the means and standard deviations of the experimental and control group's pre- and post-treatment sport enjoyment scores, as well as the means and standard deviations of the young (ages 6-9) and old (ages 10-15) age categories within each condition.

Table 3

Means and standard deviations of sport enjoyment scores for the experimental and control groups at pre- and post-treatment, as well as for the young (ages 6-9) and old (ages 10-15) age categories within each condition.

		Time 1		Time 2	
Condition		M	SD	M	SD
Experimental (n=117)		4.86	.30	4.93	.21
	young (n=63)	4.85	.32	4.90	.24
	old (n=54)	4.86	.29	4.96	.15
Control (n=113)		4.87	.37	4.82	.41
	young (n=26)	4.88	.49	4.92	.23
	old (n=87)	4.87	.33	4.79	.44

Sport Commitment

A 2 X 2 within subjects factorial ANOVA was performed to examine changes in participant's sport commitment scores from pre- to post-treatment. The two factors were:

(a) Condition (experimental and control); and (b) Time (pre- and post-treatment sport commitment scores); with repeated measures on the second factor. The results revealed a significant interaction for sport commitment by time, $F(1, 211) = 4.36$, $p < .038$. The experimental group's scores increased, whereas the control group's scores remained unchanged, yielding a statistically significant interaction between pre- and post-treatment sport commitment scores. Further, within subjects factorial ANOVA revealed no statistically significant differences between the pre- and post-treatment sport commitment scores between the age categories of the conditions. Table 4 represents the means and standard deviations of the experimental and control group's pre- and post-treatment sport commitment scores, as well as the means and standard deviations of the young (ages 6-9) and old (ages 10-15) age categories within each condition.

Table 4

Means and standard deviations of sport commitment scores for the experimental and control groups at pre- and post-treatment, as well as for the young (ages 6-9) and old (ages 10-15) age categories within each condition.

Condition		Time 1		Time 2	
		M	SD	M	SD
Experimental (n=117)		4.49	.54	4.62	.48
	young (n=63)	4.53	.54	4.65	.52
	old (n=54)	4.45	.55	4.58	.44
Control (n=113)		4.53	.68	4.53	.67
	young (n=26)	4.58	.78	4.55	.73
	old (n=87)	4.52	.65	4.52	.66

Behavioural Intentions

A 2 X 2 within subjects factorial ANOVA was performed to examine changes in participant's behavioural intention scores from pre- to post-treatment. The two factors were: (a) Condition (experimental and control); and (b) Time (pre- and post-treatment

behavioural intention scores); with repeated measures on the second factor. The results revealed no statistically significant differences. Further, within subjects factorial ANOVA revealed no statistically significant differences between the pre- and post-treatment behavioural intention scores between the age categories of the treatment conditions. Table 9 in Appendix E represents the means and standard deviations of the experimental and control group's pre- and post-treatment behavioural intention scores, as well as the means and standard deviations of the young (ages 6-9) and old (ages 10-15) age categories within each condition.

Intrinsic Motivation

The Intrinsic Motivation Inventory (Ryan, 1982) gives each individual a score on the four subscales which are then summed to yield an overall measure of intrinsic motivation. The internal consistency for the three subscales of the intrinsic motivation inventory, as well as the overall scale internal consistency was assessed using Cronbach's (1951) coefficient alpha. Internal consistency for the above measures were generally quite adequate. In addition, good pre/post-test reliability was obtained. Alpha coefficients pre- and post-test for the three intrinsic motivation subscales were: interest/enjoyment (□=.73-pre, and .73-post), perceived competence (□=.87-pre, and .81-post), effort/importance (□=.68-pre, and .62-post), and total intrinsic motivation inventory (□=.87-pre, and .84-post). For the perceived competence subscale, the "I can't play hockey very well" item was dropped from the analysis due to the participant's overall inability to conceptualize the reverse scoring of this item. I was frequently asked "what does this mean...how do I score

this?" by participants; therefore, my responses confounded the results for this item. In addition, removal of this item improved the alpha coefficient from .55 to .87 for the perceived competence subscale. Furthermore, the pressure/tension subscale was dropped from the analysis due to poor internal consistency and test/re-test reliability (□=.44-pre, .50-post), partially due to the participants' difficulties understanding these terms which, based on their comments, were often novel or meaningless terms. McAuley, Duncan, and Tammen (1989) stated that the exclusion of any one dimension fails to adversely effect the remaining factors and that shorter versions of each subscale have been utilized and are reliable; thus justifying the exclusion of the pressure/tension subscale and the one item from the perceived competence subscale. Therefore, participant's overall score on the scale was determined by summing the means of the remaining three subscales of perceived competence, effort, and interest-enjoyment. A 2 X 2 within subjects factorial ANOVA was performed to examine changes in participant's intrinsic motivation scores from pre- to post-treatment. The two factors were: (a) Condition (experimental and control); and (b) Time (pre- and post-treatment intrinsic motivation scores); with repeated measures on the second factor. The results revealed no statistically significant differences. Further, within subjects factorial ANOVA revealed no statistically significant differences between the pre- and post-treatment intrinsic motivation scores between the age categories of the conditions. Table 10 in Appendix E represents the means and standard deviations of the experimental and control group's pre- and post-treatment intrinsic motivation scores, as well as the means and standard deviations of the young (ages 6-9) and old (ages 10-15) age categories within each condition.

Part II - Qualitative Analysis

As per the *Enjoyment-profiling* steps outlined in Methods-procedure section, each participant created an *enjoyment-profile*. Hermeneutic interpretation of the data incorporated the multiple methods used in this study, which were: (1) the written responses of the participants on their *enjoyment-profiles*; (2) the researcher's field notes of observations on the participants and the program; and (3) the researcher's field notes of conversations with participants and parents. This interpretation, for both the younger (ages 6-9) and older (ages 10-15) participants, yielded the same seven major themes. In addition, Lincoln and Guba (1985) discussed the strength of creating a 'reasonable construction' of the data as an alternative to validity. A 'reasonable construction' is one that might be made subsequently by another researcher reviewing the data, and in this research study another investigator's (my supervisor) analysis and interpretation of the data was consistent to the findings presented here, thus supporting these results as a 'reasonable construction'. Table 5 identifies the seven themes in alphabetic order and the respective enjoyment variables that contribute to each theme.

Table 6 and Table 7 represent the ranking of the enjoyment themes according to both importance and frequency for the young and old groups, respectively. The 'mean importance' for each theme represents the mean of the means for the enjoyment variables within each respective theme. As each theme consisted of several enjoyment variables, each of which were observed numerous times, a mean for each variable was calculated and then the mean of the variable means was calculated to yield the 'mean importance' for each theme. The 'frequency mentioned' for each theme represents the percentage of

participants that identified at least one enjoyment variable from that theme. The 'mean importance' and 'frequency mentioned' data was collected from the participant's *enjoyment-profiles*.

Out of the top four enjoyment themes for 'mean importance', both the young and old groups shared three of the same, which were *effort and commitment factors*, *mastery processes*, and *aesthetic rewards and sensations*. Of note however, these themes all represent important sources of enjoyment for these participants; therefore, none of these themes should be considered 'unimportant' because they would not have emerged if that was the case. The 'mean importance' value (out of a possible 10) ranged from 7.96 (*basic skills performance*) to 9.24 (*effort and commitment factors*) for the young group, and from 7.06 (*aggressive / intimidating behaviours*) to 9.09 (*mastery processes*) for the old age group.

Table 5

Sources of enjoyment themes and contributing variables; from the enjoyment-profiles of the experimental-young and experimental-old groups, n=118.

Source of Enjoyment	Contributing Variables
Achievement outcomes	scoring, getting assists, winning, overtime goals, and making a good team
Aesthetic rewards and sensations	excitement, sportsmanship, just playing, creativity, balance and speed
Aggressive / intimidating behaviours	hitting/checking, fighting, getting penalties, and being aggressive
Basic skills performance	passing/making plays, shooting, stick handling and puck control, skating, and stopping
Effort and commitment factors	commitment, fitness, challenge, hardwork, exercise, and effort in drills
Mastery processes	learning skills, improving skills, doing well, practicing skills, executing drills, and playing your position well
Pressured achievement situations	overtime, shootouts, feeling pressure, competition, tournaments, finals, breakaways, faceoffs, and games

Table 6

Enjoyment themes and rankings according to mean importance and frequency mentioned for the experimental-young (ages 6-9) group, n=58.

Themes	importance ranking (mean / 10)	frequency ranking (% of participants)
Effort and commitment factors	1 (9.24)	6 (40%)
Aggressive / intimidating behaviours	2 (9.18)	5 (47%)
Mastery processes	3 (8.88)	7 (36%)
Aesthetic rewards and sensations	4 (8.73)	3 (57%)
Achievement outcomes	5 (8.31)	4 (52%)
Pressured achievement situations	6 (8.06)	2 (59%)
Basic skills performance	7 (7.96)	1 (81%)

Table 7

Enjoyment themes and rankings according to mean importance and frequency mentioned for the experimental-old (ages 10-15) group, n=60.

Themes	importance ranking (mean / 10)	frequency ranking (% of participants)
Mastery processes	1 (9.09)	7 (42%)
Aesthetic rewards and sensations	2 (8.76)	4 (53%)
Achievement outcomes	3 (8.57)	5 (47%)
Effort and commitment factors	4 (8.49)	2 (57%)
Basic skills performance	5 (7.82)	1 (78%)
Pressured achievement situations	6 (7.78)	6 (43%)
Aggressive / intimidating behaviours	7 (7.06)	3 (55%)

DISCUSSION

I was invited to attend a hockey tournament that my neighbour's son was playing in over the Christmas holidays a couple of years ago. As I entered the arena, heard the crowd and saw the boys on the ice skating madly around after the puck, it all came back to me- the excitement, the celebrations, the disappointments, and the over-riding pressure to

win. Looking into the crowd, I watched the faces and behaviours of parents which appeared to revolve around and support the *achievement* outcomes theme identified earlier. Without entering into a discussion of the vast social phenomena surrounding youth sports (see Coakley, 1993 for discussion), I can say with confidence that winning is viewed as the pinnacle of participation with the intrinsically motivating aspects of participation often being treated as consolation prizes. Oddly enough, this phenomenon is generally imposed by adults on those youths who may have entered hockey for reasons other than extrinsic ones, namely, for the enjoyment and intrinsically motivating aspects of participation (e.g., Fry, McClements, & Sefton, 1981; Gill, Gross, & Huddleston, 1983; Gould, Feltz, Weiss, & Petlichkoff, 1982; Sapp & Haubenstricker, 1978; Passer, 1982). It would be naive to ignore the fact that 'winning' has a positive effect on overall enjoyment, but I feel that the intrinsically motivating aspects should be celebrated as much. Often it is those intrinsically motivating sources of enjoyment that provide the means for achieving the win; things like effort and commitment factors, mastery processes, aesthetic rewards and sensations, and performing the basic skills of the sport. It is from this philosophy, based on my experiences in hockey as a player, coach, teacher, and avid fan, that *Enjoyment-profiling* developed; a program that provides an opportunity for youth athletes to become more aware of the diverse sources of enjoyment in hockey, while focussing on those sources which are self-determined and intrinsically motivating- a celebration of sorts.

The results of this study are discussed in three parts. Part I discusses the statistical analysis of the four dependent variables (sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation) based on the observed pre- and post-treatment scores

of the participants. Part II discusses the contextual factors surrounding the program, the themes of enjoyment sources that emerged from the hermeneutic interpretation of the experimental participant's *enjoyment-profiles*, and the feedback received from both parents and participants. Part III discusses the combination of the quantitative and qualitative data analyses.

Part I - Quantitative Discussion

Sport Enjoyment

In recent years many researchers have come to realize the importance of enjoyment and intrinsic motivation in youth sport and have advocated the necessity for parents and coaches alike to foster enjoyable experiences. Unfortunately, published research has not yet provided any empirical evidence supporting participant-centred interventions or programs designed specifically to enhance enjoyment. This lack of empirical support may either be due to (in)effective participant-centered enjoyment programs not being published, or a lack of empirical testing of such programs, or that no programs have been designed. Either way, *Enjoyment-profiling* is an initial attempt to enhance participant enjoyment with the participant being the active agent. Scanlan and Simons (1992) offered the following advice for parents and coaches:

> There are a variety of sources that can make the sport enjoyable, many of which are common across sport contexts. While any particular source may be more significant to one individual than to another, there are certainly ample opportunities to experience this positive emotion in sport. The key is to make certain that a variety of sources are available to assure that enjoyment can be experienced (p. 214).

Enjoyment-profiling reflects this advice by providing an opportunity for participants to

become aware of the variety of enjoyment sources that are both available and important to them and encourages the participants to experience these sources.

Harris' (1984) ethnographic study of the psychological concepts important to 10 to 12 year old boys in organized baseball found that players reported having more 'fun' partially due to experiencing greater control of their actions. This finding is consistent with Deci's (1975) and Deci and Ryan's (1985) enjoyment-intrinsic motivation relationship, as well as supporting the results of this study. *Enjoyment-profiling* allows participants the opportunity to control (self-determine) the content of their enjoyment-profile and allows participants the opportunity to focus on the self-determined sources of enjoyment. The small change in sport enjoyment for the experimental group following the program supports to some extent Deci's (1975) and Deci and Ryan's (1985) contentions about enjoyment and intrinsic motivation, as well as suggesting that *Enjoyment-profiling* may be effective program for enhancing sport enjoyment.

In addition to the intrinsic motivation focus of the program, participants were given the opportunity to identify and explore sources of enjoyment from the broad spectrum of sources they constructed. It may be that some of the extrinsically motivating aspects had been taken for granted as well, thus the enhanced self-awareness of these sources in relation to others may have served to increase sport enjoyment as well. By allowing participants an opportunity to explore the broad spectrum of sources and to realize the relative importance of each source, an overall increased awareness of sport enjoyment, not just the intrinsic factors, was made possible and may partially explain the results of this research.

In response to Scanlan et al.'s (1993) conclusion that it is essential to give more focus to enjoyment in understanding the participant's motivation so that we can fuel the emotional fire of enjoyment, *Enjoyment-profiling* appeared to do this. The significant interaction found for sport enjoyment over time revealed the experimental group's enjoyment scores tended to increase while the control group's scores tended to decrease; thus suggesting that *Enjoyment-profiling* affected sport enjoyment. In addition, the age based comparison of the young (ages 6-9) and old (ages 10-15) participants between and within treatment conditions also yielded a significant interaction. Both the experimental-young and experimental-old group's enjoyment scores tended to increase, while the control-old group's enjoyment scores tended to decrease. No significant changes occurred within any group, however, there was a significant interaction which suggests the program was successful in maintaining the already high pre-treatment sport enjoyment scores for the experimental groups.

Sport Commitment

The results of this study revealed a significant interaction for sport commitment over time, where the experimental group's scores tended to increase while the control group's scores remained unchanged. No significant changes occured within the groups, however, the significant interaction suggests the program was succesfull in maintaining the already high pre-treatment sport commitment scores for the experimental groups.

According to the Sport Commitment Model (SCM), sport commitment is a factor of five variables, one of which is sport enjoyment. Scanlan et al.'s (1993) study of youth

baseball and softball participants found that sport enjoyment was positively related to sport commitment ($r=.71$, $p<.0001$) and stepwise multiple regression found sport enjoyment to be a specific determinant of sport commitment ($\beta=.61$, $p<.0001$). Scanlan and Lewthwaite (1986) and Scanlan et al. (1989) found evidence with both elite and youth sport participants that sport enjoyment was positively related to an increased desire for continued participation in the sport. Likewise, Weiss (1993) and others (e.g., Freedson & Rowland, 1992; Rowland, 1990; Sallis & McKenzie, 1991) argued that children must have enjoyable experiences as an integral part of their involvement in sports in order to sustain continued activity. Weiss (1993) concluded that doing this means "turning children on" to physical activity by making it enjoyable so that they keep coming back because of their intrinsic motivation to be involved in the activity.

Weiss and others highlighted the theoretical and empirical relationship between sport enjoyment and continued involvement in the activity (sport commitment) as proposed by Scanlan et al. (1993) in the SCM. The significant interaction for sport commitment over time, where the experimental group's scores increased and the control group's scores remained unchanged, may be partially due to the positive relationship between sport enjoyment and sport commitment, as noted above, thus supporting the contention that the program would enhance sport commitment. *Enjoyment-profiling* produced a significant interaction for sport enjoyment over time, as discussed above, thus the observed change in sport commitment may be partially explained by the documented positive relationship between these two constructs.

In addition however, the program may have had a direct effect on sport commitment

through some other process(es) beyond the scope of the program. Sport commitment is proposed to be influenced by five variables, including sport enjoyment; therefore, it is possible that the program may have affected either positively or negatively the involvement alternatives, personal investments, involvement opportunities, or social constraints variables of sport commitment, thus partially accounting for the observed result. Further examination of the proposed sport commitment variables and their relationships with sport commitment will be the focus of future research within the framework of this program.

Behavioural Intentions

Five Likert style statements to assess the individual's behavioural intentions were included in the questionnaire. The statements represented progressively harder 'intentions' towards future participation in ice hockey ranging from "I intend to play hockey this season" to "I intend to participate in additional hockey clinics and schools this season." The results revealed no statistically significant differences between the experimental and control group's behavioural intentions over time. These are clearly highly committed players due to the context of the hockey school and their high pre-treatment sport commitment scores, thus partially explaining this non-significant result. Further research of different populations in different contexts within hockey (e.g., regular season, houseleague) might better discriminate behavioural intentions, as measured in this study.

Another possible explanation concerns money and the ownership of that money. I would argue that most youths between the ages six to fifteen do not have the disposable

income to finance additional hockey schools and clinics and therefore must rely on their parent(s) for this money. This presents a problem for many youths due to the already expensive nature of hockey participation where the money needed for things like equipment purchase and maintenance, registration fees, tournament fees, transportation/travel, and even visits to the concession stand comes primarily from the parent(s). For these players to participate in additional hockey schools and clinics would require them to know their parent(s) intentions to finance such events; therefore, effecting the participant's intentions by removing the self-determined nature of the intent.

In consideration of the above arguments, it is possible that the participant's sport commitment (a psychological construct) increased slightly while their behavioural intentions remained unchanged; that is, they became more psychologically committed to perform behaviours that they already had strong intentions for. From this, statements of behavioural intention will need to be more discriminative and sensitive to the participants' situations in future studies so that they better reflect any observed changes in this construct.

Intrinsic Motivation

The four subscales of interest-enjoyment, perceived competence, effort-importance, and pressure-tension were used to obtain the participant's intrinsic motivation score from the Intrinsic Motivation Inventory (Ryan, 1982). Due to participants' difficulty comprehending the terms/statements comprising the pressure-tension subscale and its poor alpha reliability coefficients, this subscale was dropped from the analysis. The means for

the remaining three subscales were summed to give an overall intrinsic motivation score for each participant. Statistical analysis revealed no significant interactions for intrinsic motivation by time between the treatment groups. Table 9 in Appendix E reports the mean intrinsic motivation scores for the treatment groups, pre- and post-treatment. The pre-treatment mean for the experimental group was 17.66 (out of a possible total of 21) while the control group's mean was 17.80 (out of a possible total of 21), thus indicating relatively high pre-treatment intrinsic motivation scores for both conditions. Previous research by McAuley, Duncan, and Tammen (1989) with physical education students in a basketball context obtained a mean intrinsic motivation score of 13.92 (out of a possible total of 21) when calculated using the same methods as the present study. Evidently, the discrepancy in the intrinsic motivation scores between the physical education students and the participants of the hockey school in this study is considerable, The participants in the present study reported quite high intrinsic motivation scores pre-treatment, which might be explained by the context of this study. The hockey school emphasizes *mastery processes* and *effort and commitment factors*, which are representative of intrinsic motivation and are inherent in this context, and the participants were aware of this when they registered. It follows, therefore, that the participant's in this study may have approximated a 'ceiling effect' with their pre-treatment scores, thus providing a possible explanation for the non-significant interaction for intrinsic motivation by time.

Part II - Qualitative Discussion

> Interpretation is the working out of possibilities that have become apparent in a preliminary, dim understanding of events. This pre-understanding embodies a particular concern, a kind of caring. It provides a way of reading, a preliminary initial accessibility, a stance or perspective (a fore-structure) that opens up the field being investigated. Interpretation operates within this initial way of understanding and reading. This means that interpretive accounts are not undisciplined guesses, and do not shoot beyond the available evidence in a speculative way. They are ordered and organized by the forestructure of projection; the fore-structure guides interpretation. The guidance is not automatic, of course; we have a responsibility to prepare so that we "enter the hermeneutic circle" with an appropriate fore-structure, and so conduct our interpretation in a proper manner (Packer & Addison, 1989).

The literature reviewed earlier in this text, along with my personal history and experiences, represent my pre-understandings as I entered the hermeneutic circle. In particular, the SCM and Sport Enjoyment Model of Scanlan and her colleagues (e.g., Scanlan et al., 1989; Scanlan & Simons, 1992; Scanlan & Lewthwaite, 1986) and Deci and colleagues' (e.g., Deci, 1975, 1980; Deci & Ryan, 1980, 1985) theory of Intrinsic Motivation significantly shaped my empirical pre-understandings.

Before commencing the interpretive account of the *enjoyment-profiles*, it is necessary to describe the contextual factors that surrounded the data collection so to facilitate the interpretation. The setting/environment, participants, and program delivery will be discussed.

<u>The setting / environment</u>

The hockey school took place in a recreation centre in a middle class neighbourhood in Victoria, B.C., and ran for three one-week sessions during August. The hockey school

was in session for eight hours a day (including one hour for lunch) and was quite structured (programmed) and intense (no 'free-time' to just hang out- besides lunch). The hockey school had access to many different facilities within the recreation center, including a swimming pool with waterslides, a weight room, a roller-hockey rink, an outdoor basketball court, and a soccer field, all of which were used at various times during off-ice training. The ice arena itself was surrounded by viewing windows from where numerous parents/guardians observed their children on the ice. The participants were able to keep all of their equipment in supervised dressing rooms during the day where it was safe from vandalism and/or theft.

The on-ice hockey training constituted 3.5 hours a day of intensive, demanding, challenging, and fun activities aimed at technical and tactical skill improvement. The remaining 3.5 hours off-ice took advantage of the other various facilities, as well as completing the off-ice portion of *Enjoyment-profiling*. The program (off-ice portion) took place in a classroom in a school directly next to the recreation center. The classroom was not particularly conducive to learning. Rickety old desk-chair units, poor lighting, empty bulletin boards (because school was not in session), non-existent air circulation, and an often hot and humid climate (only two windows partially opened) greeted the participants each time they entered the room. Even under these conditions, once the participants were settled into the classroom, the program was received quite positively, with a few minor exceptions where certain behavioural problems arose (e.g., throwing pencils, writing words directly on the desks, teasing other participants).

The overall attitude and expectations of the staff at the hockey school emphasized

effort, commitment, mastery of skill, and enjoyment. The parents, staff, and participants supported this attitude and conveyed that anything less would be unacceptable.

The participants

The hockey camp was divided into two age groups, ages 6-9 and 10-15. The participants were primarily middle class Caucasian males, with few ethnic minorities. Within each group there was a range of behavioural and attentional characteristics (e.g., reserved to out-going, calm to hyper-active), therefore being a heterogenous sample. All of the participants had at least one year of previous hockey experience (except for one twelve year old boy who had never played organized hockey before) and some of the older participants even had up to ten years of hockey experience. Each youth was fully equipped with at least average quality hockey gear with some participants wearing over $1200 worth of equipment- and the participants are still growing!?!? Overall, initial sport commitment and enjoyment was high, as evidenced in the data collected pre-treatment (sport commitment mean = 4.49; sport enjoyment mean = 4.86). These high pre-treatment sport commitment and enjoyment scores might be expected from this population given that they have chosen to be inside an arena during the summer. Scanlan et al. (1993) concluded that due to the self-selected nature of youth sport and the positive way in which athletes typically view their current involvement, it is not unreasonable to see the constrained variance and skewness of data pertaining to sport commitment and enjoyment. In particular, at least two participants (that I was aware of) participated in five weeks of hockey school during the summer months- that is quite a commitment, both financially and

psychologically by the participants and their parent(s).

With the wide range of age at the hockey school, variations in the effectiveness of the program might be expected, as was the case. The program was received better overall by the older group. This may be possibly due to (1) their ability to work independently on a task while in a classroom setting, (2) their recognition of the role enjoyment plays in their participation, (3) their self-confidence to attempt a self-awareness activity, (4) their recognition that the program may ultimately enhance their performance and enjoyment in hockey, or (5) their overall maturity and experience to understand the program. Although the program was positively received by the younger participants, more research is needed to improve the effectiveness of this already effective novel program.

The program delivery

I was the only person directly responsible for delivering the content of the *Enjoyment-profiling* program, both on- and off-ice. During the off-ice portions I was given a helper whose role was to assist the participants with minor questions, reinforce the key concepts and instructions that I gave, and generally assist in behavioural control. Often times these 'helpers' were more trouble than they were worth. The helpers were youth volunteers from a leadership development program and were 15 to 16 years of age. The proximity of age between some of the participants and the helpers, as well as their overall lack of training and maturity to deal with responsibility sometimes resulted in minor 'battle of wills' or other inappropriate behaviours between participants and helpers. Although this did not present a major obstacle in the delivery of the program, it was still

distracting and counterproductive at times. In the future I will request, and hopefully select, the individuals who will assist me in the off-ice portion of the program. During the on-ice portion of the program I was assisted by the other camp instructors. As the program was well received by the other instructors, their assistance on-ice was both supportive and co-operative.

Enjoyment-profiles

Each participant in the experimental group was exposed to the program in the group setting. Through this process, each participant created an *enjoyment-profile* containing a list of their most important sources of enjoyment and a rating of importance (1 = low, to 10 = high) for each source of enjoyment. Through hermeneutic interpretation of these *enjoyment-profiles*, seven major sources of enjoyment themes emerged (see Table 5, Results section). The same seven themes emerged for both the young and old groups.

The *effort and commitment factors* theme (e.g., fitness, hardwork, effort in drill, commitment) emerged as the most valued theme for the younger group (M=9.24) and the fourth most valued theme for the older group (M=8.49). One of the overall goals of the hockey school was to physically condition the participants in preparation for the upcoming season, thus demanding effort from the participants. In addition, the hockey school took place during the summer (August) which, for most kids, is the final month of summer vacation, thus reflecting their commitment to hockey. I observed while being on the ice and working with all of the participants that their work ethic and commitment was unquestionable. I believe that giving an all-out effort was not seen as a chore or a burden

for these hockey players, but rather as something they truly enjoyed and prided themselves on. Ironically, this attitude was not always observed in some of their off-ice activities and games. While playing soccer, baseball, swimming, running, or doing strength and endurance tests, I observed that effort and commitment to these tasks was a distant second to the effort and commitment displayed on the ice. Some of the comments participant's made were "I don't want to get tired out before going on the ice" and "If I use up my energy now I won't have any fun on the ice." These comments accurately capture the underlying commitment and effort that was valued so highly by both age groups. These participants gave up part of their summer vacation to attend a hockey school where effort and commitment factors were emphasized and expected, thus supporting the emergence of this sources of enjoyment theme, which is also consistent with previous literature (e.g., Scanlan et al., 1993; Scanlan & Lewthwaite, 1986; Scanlan et al., 1989; Sapp & Haubenstricker, 1978; Gould, Feltz, Weiss, & Petlichkoff, 1982; Gill, Gross, & Huddleston; 1983; Chalip, Csikszentmihalyi, Kleiber, & Larson, 1984; Brustad, 1988; Wankel & Sefton, 1989).

Aesthetic rewards and sensations (e.g., excitement, sportsmanship, just playing, balance, speed) was the fourth most valued theme for the younger group (M=8.73) and the second most valued theme for the older group (M=8.76). This theme represents some of the inherent motivators and reinforcers that are experienced simply through participation- the same ones that I enjoyed so much as a youth while playing on the outdoor rinks, and is consistent with previous research (e.g., Gould, Feltz, Weiss, & Petlichkoff, 1982; Wankel & Kreisel, 1985; Scanlan, Stein, & Ravizza, 1989;

Csikszentmihalyi, 1975). One of my favourite sayings is "I daydream for the sake of daydreaming" which seems to capture the essence of this theme. Restated, "I play hockey for the sake of playing hockey" means that the products of my hockey experiences are not as important as the processes of my hockey experiences. After spending an intensive week with the participants, I realized that their love for hockey, their excitement while on the ice, and their anticipation while getting ready for on-ice sessions was remarkable. The value given to this theme is refreshing because it reinforces my experiences as a youth and it signifies that the *aesthetic rewards and sensations* gained through participation are still major sources of enjoyment.

The *mastery processes* theme (e.g., learning new skills, improving skills, playing your position well, practicing skills) was valued third overall for the younger group (M=8.88) and first overall for the older group (M=9.09). The overall objective of the (any) hockey school was to develop and improve the technical and tactical skills of the participants; therefore having a mastery approach. Generally, participants have chosen to be in hockey school in order to develop and improve their skills; thus, given the hockey school's objective and the participant's objective, the importance of the mastery processes theme may be accounted for and is consistent with previous literature (e.g., Sapp & Haubenstricker, 1978; Spink & Roberts, 1980; Roberston, 1981; Fry, McClements, & Sefton, 1981; Gould, Feltz, Weiss, & Petlichkoff, 1982; Gill, Gross, & Huddleston, 1983; Wankel & Kreisel, 1985; Scanlan, Stein, & Ravizza, 1989; Harris, 1984; Csikszentmihalyi, 1975). Interestingly, this theme was valued by both age groups more than the *achievement outcomes* theme which initially surprised me. With the blatant reinforcement

by the media, coaches, parents, and peers regarding the importance of winning and scoring, I expected mastery processes to be valued less than the products they make possible. Through anecdotal evidence and personal experience, the first question asked by parents when their child arrives home following a hockey (soccer, baseball, basketball. etc...) game is "did you win?" Sometime after this, and not necessarily next, the parent asks "how well did you play?" The importance of *achievement outcomes* are routinely emphasized this way even though they could not be realized without *mastery processes.* In retrospect, I realize that I underestimated the importance of the *mastery processes* theme with this population in this context. When *mastery processes* are triangulated with the importance of *effort and commitment* and *aesthetic rewards and sensations*, a generic *enjoyment-profile* is created which has the intrinsically motivating variables as essential sources of enjoyment due to their self-determined and competence related nature.

The *achievement outcomes* theme (e.g., scoring, winning, overtime goals, getting assists) was valued fifth overall by the younger group (M=8.31) and third overall by the older group (M=8.57). The emergence of this theme should not be a surprise, as discussed above. The positive affect derived from *achievement outcomes* cannot be denied as important sources of enjoyment and is consistent with previous research (e.g., Fry, McClements & Sefton, 1981; Wankel & Kreisel, 1985; Scanlan, Stein, & Ravizza, 1989; Csikszentmihalyi, 1975). Interestingly, the younger group did not give *achievement outcomes* as high a rank in importance as the older group. This finding is similar to Wankel and Kreisel's (1985) study on enjoyment factors between age groups in hockey where the 7-8, 9-10, and 11-12 age groups consistently rated winning as less important

than the 13-14 age group. The trend appeared to be that the older youths value *achievement outcomes* more than their younger counterparts. A similar trend was found in the current study, except that this trend occurred at an even younger age (old group mean age=12.11 years) than the 13-14 year old age group from ten years earlier. The explosion of sports media coverage, the reality of 'waiting lists' for hockey programs due to the increasing numbers of participants, the 'cutting' of programs and teams with poor performance records, and the recent successes of Canada in the international hockey scene (to identify a few factors) may help explain why *achievement outcomes* have become increasingly important for this population as they enter their early teen years.

Basic skills performance (e.g., passing, shooting, skating, stick handling) was ranked seventh in importance for the younger group (M=7.96) and fifth for the older group (M=7.82). Although this theme was not ranked in the top four for importance by either group, it was the single most mentioned theme by a large percentage for both the young (81%) and old (78%) groups. The frequency that *basic skills performance* was identified indicates this theme's fundamental importance to enjoyment and is consistent with previous literature (e.g., Fry, McClements, & Sefton, 1981; Wankel & Kreisel, 1985; Csikszentmihalyi, 1975). I observed the participants quite often during the unstructured / free times between drills or while waiting for other participants to get onto the ice and found that skating, stickhandling, shooting, stopping, and passing amongst themselves was how they chose to spend this free time- much the same as I did as a youth (and still do) on the outdoor rinks. The enjoyment experienced from the *basic skills performance* is fundamental to the hockey experience and is at the root of all other sources of enjoyment.

The *aggressive / intimidating behaviours* theme (e.g., hitting/checking, fighting, getting penalties, being aggressive) was valued second overall for the younger group (M=9.18) and seventh overall for the older group (M=7.06). It is no secret that 'Canadian-style hockey' has achieved considerable international success because of its ability to incorporate exceptional skill level with exceptional *aggressive / intimidating behaviours*, and in fact, is something that 'Canadian hockey' prides itself on. This theme is new to the literature, possibly because (1) researchers have not included it on their measurement tools before, (2) qualitative methods have not been used with this population to identify sources of enjoyment, (3) it has emerged but has been discarded due to it's violent content, or (4) it is a new phenomenon that has not yet been identified. Either way, I find it is an interesting issue to address. Based on my observations on- and off-ice, the participants placed considerable importance (the fact that it emerged as a theme) in the use of *aggressive / intimidating behaviours* as an end in itself; fighting for the sake of fighting, hitting for the sake of hitting, getting penalties for the sake of getting penalties, etc. The emergence of this theme may be partially explained by the marketing and entertainment industry's creation of things like 'The World Wrestling Federation' (choreographed ultra-violent wrestling), 'American Gladiators' (television program which emphasizes physical dominance over weaker opponents), and Don Cherry's 'Rockem' Sockem' videos (#'s 1 through 6) (celebrating hockey fights, punishing body-checks, and hard-nosed players). Interestingly, the younger participants placed more importance on this theme than the older participants. Ironically, only the older group actually used *aggressive / intimidating behaviours* on-ice while the younger group simply talked about

it off-ice. Off-ice the young participants could say anything they want, talk tough, or act tough, but on-ice they never followed through. Nevertheless, this theme emerged as important to both age groups and is definitely a topic which must be researched further.

The theme of *pressured achievement situations* (e.g., overtime, shootouts, competitions, breakaways, faceoffs) was valued sixth for both the younger group (M=8.06) and older group (M=7.78). This theme represents the enjoyment derived from being in situations where your *achievement outcomes* partially depend on your performance so you feel the pressure, 'high drama', and urgency of the situation. Exposure to these situations alone is a source of enjoyment for these participants. Honestly, this theme was a surprise to me, only because I had never really become aware of its importance in my hockey experiences. Compare the following two possible scenarios: (1) You are competing against an opponent who is significantly inferior to you and your team. The outcome is a foregone conclusion- you will win/score even if you don't play well. There is no anxiety, pressure, or urgency for a great effort on your part in order to succeed- it will happen regardless; or (2) You are competing against an opponent who has been forcing you to be your best all game, and you are forcing them likewise. The outcome is undetermined and any minor mistake by either side could decide the outcome. The pressure, 'high drama', and urgency of the situation fill the atmosphere- who has what it takes to be successful. I would argue that the second scenario captures the essence of the *pressured achievement situations* theme; it is an important reason for why you play the game because situations like scenario-1 do not provide this source of enjoyment. Previous researchers (e.g., Fry, McClements, & Sefton, 1981; Gill, Gross, &

Huddleston, 1983; Chalip, Csikszentmihalyi, Kleiber, & Larson, 1984; Brustad, 1988) have identified the 'competition' variable before, but have failed to identify the specific 'situations' (overtime, shootouts, breakaways, finals, faceoffs, and games) as sources of enjoyment. This may be in part to the limited amount of hockey specific research with youths; however, I would argue that participants in other competitive sports experience and enjoy similar *pressured achievement situations*. When the importance of the *effort and commitment*, *aesthetic rewards and sensations*, *mastery processes*, and *achievement outcomes* themes are considered, the emergence and natural fit of this theme is explained.

The Sport Enjoyment Model presented earlier in the text by Scanlan and her colleagues (Scanlan et al., 1989; Scanlan & Simons, 1992; Scanlan & Lewthwaite, 1986) represented the framework initially intended for the data interpretation. Although the model's four quadrants (achievement-intrinsic, achievement-extrinsic, nonachievement-intrinsic, and nonachievement-extrinsic) represent a solid conceptual framework, they lack the necessary specificity to capture the essence of these participant's sources of enjoyment; therefore it needs to be expanded to facilitate its applicability as an interpretive framework.

In Packer and Addison's (1989) text on the hermeneutic circle of interpretation, Addison (1989, p. 52) noted:

> At the same time that I reflected on my understandings, interpretations, and developing account, I was examining what Heidegger (1927, 1962) calls the "fore-structure" of interpretation. Heidegger argues that in order to know anything at all, we must first have some pre-understanding of what is knowable... it is important to recognize the influence of our fore-structure in order to arrive at a more explicit interpretation or account [of the data].

This passage represents the hermeneutic circle of interpretation and emphasizes the importance of both arcs: the forward arc of projection and the return arc as a movement of uncovering. The forward arc makes understanding possible through our pre-understandings, and the return arc provides the opportunity for evaluating an interpretive account (Packer & Addison, 1989), thus explaining the interpretive process I went through.

Each theme represents a distinct source of enjoyment based on the hermeneutic interpretation of (1) the written responses of the participants on their *enjoyment-profiles*; (2) my field notes of observations on the participants and the program; and (3) my field notes of conversations with participants and parents. However, I believe that there is considerable interdependency between the themes; they do not exist independent of each other inside a vacuum. I would argue for example, that the *effort and commitment factors*, *mastery processes*, *aesthetic rewards and sensations*, and *basic skills performance* themes are partially determined by each other due to their intrinsically motivating nature.

Overall, the interpretation of these themes supports one of the primary purposes of this study; to extend the sport enjoyment literature which has inferred importance of sources of enjoyment based on rank ordering by frequency. The themes in Tables 6 and 7 emerged from the participants' constructions of sport enjoyment, as opposed to being quantitative rankings of the researcher's pre-determined sources of enjoyment; therefore representing data that is personal and relevant to the participants. In addition, Tables 6 and 7 clearly indicate that frequency does not necessarily represent importance; therefore

advocating the methods used in this study for gathering meaningful and representative data.

Feedback about the program

Carson's (1986) article on "conversation as a mode of doing research" highlighted the validity of using conversation as a hermeneutic activity that allows researchers to gain new vantage points for interpreting their data. In order to assess and interpret the effectiveness of the program I entered the conversations with parents and players into my notebook. These conversations provided a rich source of information that reinforced the usefulness and effectiveness of *Enjoyment-profiling* with this population.

Walking to and from the classroom, during the lunch hour, or following an on- or off-ice activity, I was able to talk freely with the participants. As today's youths tend to speak their mind, especially if they do not enjoy something, the information they provided in our conversations was important. It was abundantly clear that the participants disliked the location (the hot and stagnant classroom) where the off-ice portion of the program took place. Otherwise the participants gave considerable positive evaluations about the program. The themes that emerged from my field notes are expressed in the following quotes:

"...you know, I've never really thought about what I enjoy in hockey... so this was really interesting" (9 year old).

"...this was the most effective off-ice program I've been in" (14 year old).

"...I normally hate the 'chalk talk' sessions where we discuss the mental side of hockey but I think what you are doing is neat" (13 year old).

"...this is something I can do in other sports too eh?- cool!" (7 year old).

These quotes reflect the overall positive responses that the program received. The first quote in particular was mentioned a few times during conversations and it really stands out to me because it captures the essence of the whole program; to increase the participant's awareness.

Often I had opportunities to speak with parents before and after activities, or while they were dropping off and picking up their child(ren). Some comments arising from these conversations were:

"...have you ever thought about doing something like this with parents or coaches- some of them could sure use it" (father of 8 year old).

"...what an interesting thing to do, how did you ever come up with this program?" (mother of 7 year old).

"...you know, it's about time someone was *doing it* and not just *saying it*!" (father of 14 year old).

I feel that this last quote represents a major problem in hockey and other youth sports. Fortunately, I would have a tough time finding a coach at the youth level who has not said at the beginning of the season that "we are here to have fun." Unfortunately, many of these coaches then proceed to lose sight of this goal and instead emphasize primarily the achievement outcomes, often at the expense of having fun. The fact that a lot of coaches say "fun" but do not do "fun" worries me. Hopefully, *Enjoyment-profiling* is a step in the right direction to correct this incongruency.

Overall, the hermeneutic interpretation of the *enjoyment-profiles* and the context surrounding the program contributes depth, breadth, new insights, and personal meaning

to the study of enjoyment in youth sports. By allowing participants to identify their sources of enjoyment using their terms and thoughts, without researcher imposed limitations on what those sources are, *Enjoyment-profiling* makes a significant contribution to the extent literature on enjoyment in youth sports.

Part III - Combined Discussion

In this section the results of the quantitative and qualitative methods are combined to complete the discussion. Scanlan and Simons (1992) stated that:

> "We look forward to a future in which qualitative and quantitative methods are used more extensively in combination to study motivational issues. Qualitative methods can yield a rich, ecologically valid database that is not limited by the conceptual impositions and experiential deficits of the researchers. This database is an important outcome unto itself. In addition, it is the foundation that can be built upon to develop more comprehensive survey instruments, and to interpret the resulting data with greater understanding of their meaning to participants" (p. 215).

Sport enjoyment tended to increase for the experimental groups following the program and the hermeneutic interpretation of the *enjoyment-profiles* identified the *mastery processes*, *effort and commitment factors*, and *aesthetic rewards and sensations* themes as the three most important sources of enjoyment overall. All of the themes emerged from the sources of enjoyment lists that were generated by the participants prior to any discussion or emphasis on intrinsic motivation. These results, from the quantitative and qualitative analysis, are encouraging. Each of the above themes represent aspects of the hockey experience which are intrinsically motivating. Deci and Ryan (1985) argued that intrinsically motivating experiences are essential for enjoyment to occur and, along with the increased awareness of the other sources of enjoyment and the goals of the

hockey school, explain the significant interaction for sport enjoyment scores by time. In addition to the above mentioned sources of enjoyment themes, four other themes emerged: (i) *basic skills performance*, (ii) *achievement outcomes*, (iii) *pressured achievement situations*, and (iv) *aggressive / intimidating behaviours*. The emergence of these themes reinforce the broad spectrum approach to understanding sources of enjoyment as each theme represents a salient and important source of enjoyment. The seven sources of enjoyment themes cannot be overlooked in future quantitative and/or qualitative sport enjoyment research; especially the *aggressive / intimidating behaviours* theme which is new to the enjoyment literature and may not be exclusive to hockey, and the *pressured achievement situations* theme which has not yet been explored beyond the superficial level of the 'competition' variable. Interestingly, the pressure-tension subscale of intrinsic motivation was dropped due the participants' unfamiliarity and difficulty comprehending the terms, as well as the subscale's poor alpha reliability coefficients. However, based on the emergence of the *pressured achievement situations* theme from the *enjoyment-profiles*, it appears that these participants are familiar with pressure-tension feelings. Possibly, these participants are simply not familiar with the subscale's terminology used to describe these experiences, thus presenting a validity concern for use of this subscale with this population. Overall, this study indicates that very sport specific contexts and behaviours contribute to each of the seven themes; therefore, more research is needed to explore and assess these sources of enjoyment if greater depth of understanding is to be realized from quantitative and qualitative research methods.

In addition, the program allowed the participants to become aware of the broad

spectrum of sources of enjoyment which, according to Weiss (1993) and others (e.g., Freedson & Rowland, 1992; Rowland, 1990; Sallis & McKenzie, 1991), are an integral part of "turning children on" to physical activity in order to sustain continued involvement; thus partially explaining the significant interaction for sport commitment by time, where the experimental group's scores increased and the control group's scores remained unchanged.

CONCLUSIONS

This study introduced and assessed a novel cognitive-behavioural self-awareness program called *Enjoyment-profiling*, using a combination of quantitative and qualitative research methods. The results support the applicability and to some extent the effectiveness of the program for enhancing sport enjoyment, sport commitment, and awareness of the sources of enjoyment, particularly with older participants (ages 10-15). This research allowed for the importance of the intrinsically motivating sources of enjoyment to clearly emerge as themes for this population, thus reinforcing the natural fit between the primary focus of *Enjoyment-profiling* and the primary focus of the hockey school; thus supporting the applicability of the program in such contexts. As hockey school participants are distinct from the other 'seasonal' youth hockey participants, caution must be taken when generalizing beyond the hockey school sample. When examining other athlete groups, the effect(s) of the program will likely vary and other sources of

enjoyment might emerge; therefore, justifying further application and assessment of this novel and promising program.

In addition, this research empirically uncovered the saliency and importance of the *aggressive / intimidating behaviours* theme with this population. In particular, the results revealed that the younger participants placed more importance on this theme as a source of enjoyment than did the older participants. This theme, although intuitively appealing, has either been ignored, unreported, untested, undetected, or misinterpreted in previous sport enjoyment literature and necessarily needs to be addressed in the future.

This initial application and assessment of *Enjoyment-profiling* has shed light on some specific possible future research studies, including:

(a) The application and assessment of *Enjoyment-profiling* with (i) other youth hockey samples (e.g., houseleagues, non-contact leagues, competitive leagues), (ii) different team sports (e.g., soccer, basketball, soft/baseball, rugby, football), (iii) individual sports (e.g., swimming, gymnastics, track and field, tennis), (iv) different athlete populations (e.g., female youths, adults, individual's with disabilities), and (v) different sport related populations (e.g., coaches, parents);

(b) Alternate forms of the program using procedural and delivery variations; and

(c) Further exploration, both quantitatively and qualitatively, of the sport specific determinants of each of the sources of enjoyment themes so that a more indepth understanding of these themes can be realized.

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APPENDICES

Appendix A

Consent Form - (Experimental groups)

TITLE: Enjoyment-profiling: An intervention with youth hockey players.

Your child is being asked to participate in a research project in conjunction with the Hockey College this summer. The study is being conducted by Bruce Pinel as part of his Masters degree requirements at the University of Alberta. This research project will examine what youth hockey players like and dislike about hockey. The results of this study will be used to help hockey coaches and directors of hockey programs, like the Hockey College, to improve their programs and coaching methods. All of the players attending the Hockey College are being asked to participate in the research study.

The research will involve only the completion of several questionnaires by your child. These questionnaires assess some of the reasons why they play hockey, what they like and dislike about hockey, and how they feel about playing hockey now, as well as in the future when other things like school and various activities will also be important to them. It is possible (but not assured), therefore, that your child will be contacted in the future to see how he/she feels about hockey participation at different times of the year. These questionnaires will be included in the off-ice training program that has been incorporated into the Hockey College this summer. The information from the questionnaires will be used to enhance the your child's experience for this camp as for the purposes outlined above. As the Hockey College has included this study into the framework of the camp, this study will not interfere with the other scheduled activities of the Hockey College.

All the information collected will be held in complete confidence. The only individuals who will see any of the information collected will be the researcher, Bruce Pinel, and his research supervisor, Dr. Wendy Rodgers at the University of Alberta. The completed questionnaires will not be available to any coaches or camp instructors. All results of the research study will only be presented as they pertain to the age groups of hockey players. At no time will any individual be mentioned or identified in the study results. Once the data collection is complete, all names will be removed from the questionnaires to ensure anonymity. The information collected will be used only for academic purposes. The

Victoria at (604) 479-7858, or his research supervisor, Dr. Wendy Rodgers in Edmonton at (403) 492-2677.

Informed Consent:

I agree to let my child participate in this research project as described above. I have read and understand the previous information regarding the research project being conducted by Bruce Pinel at the Hockey College this summer. I understand that all information will be held in strictest confidence and participant anonymity is assured. I also understand that my child may withdraw from the study at any time without consequence.

_____	_____
(Child's Name- PLEASE PRINT)	(Name of investigator-PLEASE PRINT)
_____	_____
(Signature of Parent or Guardian)	(Signature of Investigator)
_____	
(Child's signature)	
_____	
(Date)	

Consent Form - (Control groups)

TITLE: Enjoyment-profiling: An intervention with youth hockey players.

Your child is being asked to participate in a research project in conjunction with the Hockey College this summer. The study is being conducted by Bruce Pinel as part of his Masters degree requirements at the University of Alberta. This research project will examine what youth hockey players like and dislike about hockey. The results of this study will be used to help hockey coaches and directors of hockey programs, like the Hockey College, to improve their programs and coaching methods. All of the players attending the Hockey College are being asked to participate in the research study.

The research will involve only the completion of several questionnaires by your child. These questionnaires assess some of the reasons why they play hockey, what they like and dislike about hockey, and how they feel about playing hockey now, as well as in the future when other things like school and various activities will also be important to them. It is possible (but not assured), therefore, that your child will be contacted in the future to see how he/she feels about hockey participation at different times of the year. As the Hockey College has included this study into the framework of the camp, this study will not interfere with the other scheduled activities of the Hockey College.

All the information collected will be held in complete confidence. The only individuals who will see any of the information collected will be the researcher, Bruce Pinel, and his research supervisor, Dr. Wendy Rodgers at the University of Alberta. The completed questionnaires will not be available to any coaches or camp instructors. All results of the research study will only be presented as they pertain to the age groups of hockey players. At no time will any individual be mentioned or identified in the study results. Once the data collection is complete, all names will be removed from the questionnaires to ensure anonymity. The information collected will be used only for academic purposes. The information will not be used for any selection purposes by coaches or other hockey officials.

Players may decline to participate in any part or all of the research process at any time without personal consequences. They need only advise the researcher of their wishes. This study has been approved by the Ethics Committee of the Faculty of Physical Education and Recreation at the University of Alberta. If you have any questions or concerns, please do not hesitate to contact the principal researcher, Bruce Pinel, in Victoria at (604) 479-7858, or his research supervisor, Dr. Wendy Rodgers in Edmonton at (403) 492-2677.

Informed Consent:

I agree to let my child participate in this research project as described above. I have read and understand the previous information regarding the research project being conducted by Bruce Pinel at the Hockey College this summer. I understand that all information will be held in strictest confidence and participant anonymity is assured. I also understand that my child may withdraw from the study at any time without consequence.

(Child's Name- PLEASE PRINT)	(Name of investigator-PLEASE PRINT)
(Signature of Parent or Guardian)	(Signature of Investigator)
(Child's signature)	
(Date)	

Appendix B

Athletes' Opinion Survey

Name:_____ Age: _____
Number of years playing organized hockey:_____

Instructions: Please read the following sentences and circle the number that best describes how you feel.

1. How dedicated are you to playing hockey?

(not at all) 1	2	3	4	5 (very much)

2. I feel I have to play hockey so that I can be with my friends.

(not at all) 1	2	3	4	5 (very much)

3. How much effort have you put into playing hockey?

(none) 1	2	3	4	5 (very much)

4. Do you enjoy playing hockey?

(not at all) 1	2	3	4	5 (very much)

5. Would you miss your coach(es) if you quit playing hockey?

(not at all) 1	2	3	4	5 (very much)

6. I feel I have to play hockey to please my mom.

(not at all) 1	2	3	4	5 (very much)

7. How determined are you to keep playing hockey?

(not at all) 1	2	3	4	5 (very much)

8. How much of your time have you put into playing hockey?

(not at all) 1	2	3	4	5 (very much)

9. Would you miss being a hockey player if you quit playing?

(not at all) 1	2	3	4	5 (very much)

10. Are you happy playing hockey?

(not at all) 1	2	3	4	5 (very much)

11. How hard would it be for you to quit hockey?

(not at all) 1	2	3	4	5 (very much)

12. I feel I have to play hockey to please my dad?

(not at all) 1	2	3	4	5 (very much)

13. Do you have fun playing hockey?

(not at all) 1	2	3	4	5 (very much)

14. How much of your own money have you put into playing hockey for things like registration fees or equipment?

(not at all) 1	2	3	4	5 (very much)

15. Would you miss the good times you have had playing hockey if you quit?

(not at all) 1	2	3	4	5 (very much)

16. I feel that I have to keep playing hockey so that people won't think I'm a quitter.

(not at all) 1	2	3	4	5 (very much)

17. Do you like playing hockey?

(not at all) 1	2	3	4	5 (very much)

18. Would you miss your friends in hockey if you quit playing?

(not at all) 1	2	3	4	5 (very much)

19. What would you be willing to do to keep playing hockey?

(not at all) 1	2	3	4	5 (very much)

20. I intend to play hockey this season.

(not at all) 1	2	3	4	5 (very much)

21. I intend to go to all my games this season.

(not at all) 1	2	3	4	5 (very much)

22. I intend to go to all my practices this season.

(not at all) 1	2	3	4	5 (very much)

23. I intend to practice my skills outside of regular practice / game times this season.

(not at all) 1	2	3	4	5 (very much)

24. I intend to participate in additional hockey clinics and schools this season.

(not at all) 1	2	3	4	5 (very much)

25. How important are the friendship opportunities in hockey?

(not at all) 1	2	3	4	5 (very much)

26. How important are the movements and feelings of playing hockey?

(not at all) 1	2	3	4	5 (very much)

27. How important is the recognition I get for winning?

(not at all) 1	2	3	4	5 (very much)

28. How important is perfecting a skill in hockey?

(not at all) 1	2	3	4	5 (very much)

29. How important is the fitness / athleticism of hockey?

(not at all) 1	2	3	4	5 (very much)

30. How important is the recognition I get for playing well?

(not at all) 1	2	3	4	5 (very much)

31. How important are the relationship I have with my coach(es)?

(not at all) 1	2	3	4	5 (very much)

32. How important is winning?

(not at all) 1	2	3	4	5 (very much)

33. How important is being creative while playing hockey?

(not at all) 1	2	3	4	5 (very much)

34. How important is feeling special from playing hockey?

(not at all) 1	2	3	4	5 (very much)

35. How important is playing well?

(not at all) 1	2	3	4	5 (very much)

36. How important is using hockey to deal with my problems?

(not at all) 1	2	3	4	5 (very much)

37. How important is demonstrating my hockey ability?

(not at all) 1	2	3	4	5 (very much)

38. How important is matching my skills with the challenge?

(not at all) 1	2	3	4	5 (very much)

39. How important are the opportunities to travel and play in tournaments?

(not at all) 1	2	3	4	5 (very much)

Appendix C

Intrinsic Motivation Inventory

40. I enjoy playing hockey very much.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

41. I think I am pretty good at hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

42. I put alot of effort into playing hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

43. It is important for me to do well in hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

44. I feel tense when playing hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

45. I try very hard while playing hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

46. Playing hockey is fun.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

47. I would describe hockey as very interesting.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

48. I feel pressure while playing hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

49. I feel anxious while playing hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

50. I don't try very hard at playing hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

51. I think I do pretty well in hockey, compared to other players.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

52. I am very relaxed while playing hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

53. I am pretty skilled at hockey.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

54. I think hockey is a boring sport.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

55. I can't play hockey very well.

(strongly disagree) 1	2	3	4	5	6	7 (strongly agree)

Appendix D

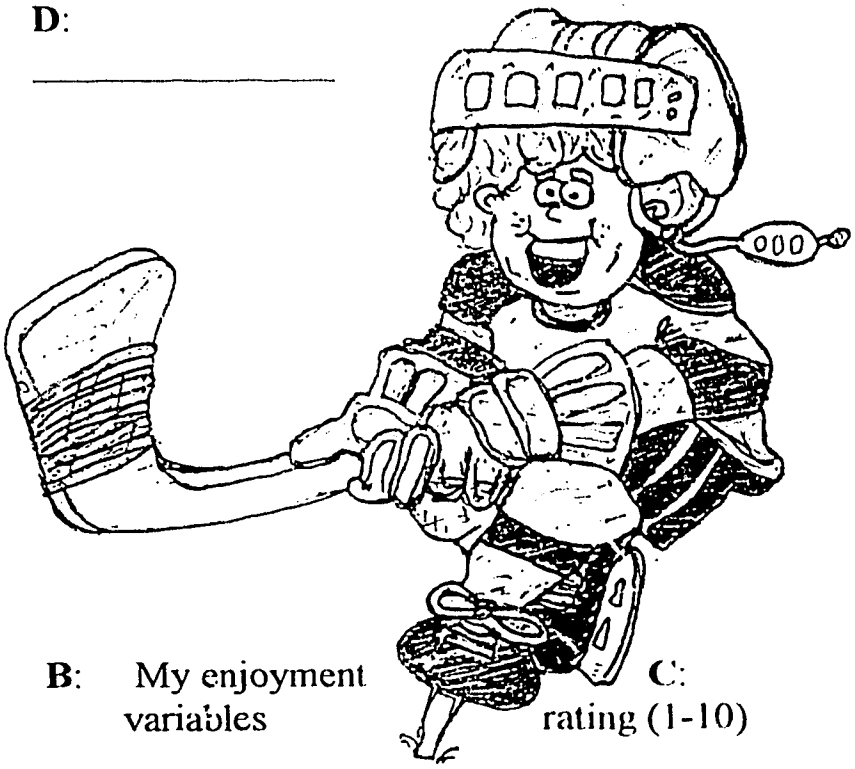
Enjoyment-profile

Name: _____

A: Enjoyment variables

D:

E:



B: My enjoyment variables

C: rating (1-10)

Appendix E - Tables of non-significant results

Table 8

Means and standard deviations of the young (ages 6-9) and old (ages 10-15) participant's pre- and post-treatment scores for the four dependent variables (sport enjoyment, sport commitment, behavioural intentions, and intrinsic motivation).

Dependent Variable		Time 1		Time 2	
	Age group	M	SD	M	SD
Sport Enjoyment					
	young (n=89)	4.86	.38	4.90	.24
	old (n=141)	4.87	.31	4.85	.37
Sport Commitment					
	young (n=89)	4.54	.61	4.63	.58
	old (n=141)	4.49	.61	4.55	.59
Behavioural Intentions					
	young (n=89)	4.51	.62	4.51	.63
	old (n=141)	4.49	.53	4.51	.49
Intrinsic Motivation					
	young (n=89)	17.92	2.06	17.98	1.80
	old (n=139)	17.61	1.66	17.91	1.58

Table 9

Means and standard deviations of behavioural intention scores for the experimental and control groups at pre- and post-treatment, as well as for the young (ages 6-9) and old (ages 10-15) age categories within each condition.

		Time 1		Time 2	
Condition		M	SD	M	SD
Experimental (n=117)		4.45	.60	4.48	.57
	young (n=63)	4.46	.63	4.44	.67
	old (n=54)	4.44	.56	4.53	.42
Control (n=113)		4.54	.53	4.54	.52
	young (n=26)	4.64	.60	4.71	.48
	old (n=87)	4.52	.51	4.50	.52

Table 10

Means and standard deviations of intrinsic motivation scores for the experimental and control groups at pre- and post-treatment, as well as for the young (ages 6-9) and old (ages 10-15) age categories within each condition.

		Time 1		Time 2	
Condition		M	SD	M	SD
Experimental (n=116)		17.66	1.84	17.99	1.54
	young (n=63)	17.71	2.15	17.94	1.73
	old (n=53)	17.60	1.40	18.05	1.29
Control (n=112)		17.80	1.83	17.88	1.78
	young (n=26)	18.43	1.76	18.09	2.02
	old (n=86)	17.61	1.82	17.83	1.72