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**MENTAL STRATEGIES
OF
INTERNATIONAL LEVEL TAEKWONDO ATHLETES**

**Sarah Chung
School of Human Kinetics
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A thesis submitted to the School of Graduate Studies
and Research in partial requirements for the degree of
Master of Art in Human Kinetics

 Sarah Chung, Ottawa, Canada, 1995



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Abstract

The purpose of this study was to explore the mental skills used by top taekwondo athletes and to determine how well Orlick's "Wheel of Human Excellence" (1995) could be applied to these athletes. In-depth interviews were conducted with nine Canadian taekwondo athletes who had competed and won medals at the international level. The results indicated that Orlick's elements of commitment, belief, full focus, positive images, mental readiness, distraction control and, constructive evaluation were common to all subjects. The presentation of rich quotes and experiences offer valuable insights and strategies for taekwondo athletes. A survey of the mental skills of Canadian taekwondo athletes was also completed by 29 athletes to determine the importance of each of the mental skills identified in Orlick's model. All were ranked as important to success; means ranged between 8.14 and 9.70 on a Likert Scale of 10.

Table of Contents

Abstract	iii
List of Figures	V
List of Tables	Vi
INTRODUCTION	1
Purpose of the Study	2
Operational Definitions	3
Significance	4
REVIEW OF LITERATURE	6
Athletic Excellence Research	7
Psychological Characteristics of Athletes	7
Mental Skills and Taekwondo	16
Model of Mental Components of Athletic Excellence	17
Mental Preparation and Performance	28
Preparatory Arousal and Precompetition Routine	31
Mental Practice in Other High Performance Domains	34
METHODOLOGY	39
Subjects	39
Instruments	40
Procedure	43
Data Analysis	44
RESULT AND DISCUSSION	52
Participant Demographics	52
Interview Study	56
Questionnaire Study	78
General Discussion	82
Concluding Remarks and Future Research	90
REFERENCES	91
APPENDIXES	

List of Figures

1. Orlick's (1995) Elements of Excellence	21
2. Mental Skills Associated With Elite Athletes	24
3. An Intergration of Orlick's Model (1995) and Mental Skills Associated with Elite Athletes	25
4. Mental Practice in Other High Performance Domain	26
5. An Intergration of Orlick's Model (1995) and Mental Skills Associated With Other High Performance Domain	27

List of Tables

1. General Demographics of Interview Sample	53
2. General Demographics of Questionnaire Study	54
3. Demographics Related to Taekwondo Background-Interview Participants	55
4. Demographics Related to Taekwondo Background-Questionnaire Participants	56
5. Number of Taekwondo Athletes Referring to the Seven Mental Skills Related to Excellence (Orlick, 1995)	57
6. Taekwondo Athletes' Opinions of the Importance of Mental Skills	79
7. Taekwondo Athletes' Personal Assessment of Their Own Application of Mental Skills or Perspectives	80
8. Taekwondo Athletes Assessments of Time Focused In Practice, Fights, and Evaluation	81

APPENDIXES

Appendix A : Taekwondoist Interview Guide

Appendix B : The Mental Aspects of Top Canadian Taekwondo Athletes

Appendix C : Consent Form

Appendix D : Letter of Information

Appendix E : Sample Interview with Athlete B

Appendix F : Sample Interview with Athlete C

Appendix G: Wheel of Human Excellence

**Appendix H: The Wheel of Excellence (Orlick, 1995) - Number of Participants who
Mentioned Each of the Subcomponents**

Introduction

According to Griffith (1925), the father of North America sport psychology, one of the objectives of sport psychologists should be to study the practices of the most successful athletes and coaches.

Orlick (1990) also stated that mental strategies are an extremely important factor influencing an athlete's performance. In fact, of the three major readiness factors rated by the athletes, mental, physical, and technical, mental readiness provided the only statistically significant link with final Olympic ranking (Orlick & Partington, 1988). Quality training, simulation training, quality imagery, daily goal setting, precompetition planning, competition focus planning, competition evaluation procedures, and distraction control were all found to be linked with excellence (Orlick & Partington, 1988).

Orlick (1992; 1995) developed a model of excellence based on interview studies investigating the mental qualities of exceptional performers in sport (Anderson & Orlick, 1995; Barbour & Orlick, 1995; Ievleva & Orlick, 1991; Imai & Orlick, 1995; Kreiner-Phillips & Orlick, 1992; McCaffrey & Orlick, 1989; Orlick & Partington, 1986, 1988; Partington, 1995) and other high performance domains (McDonald & Orlick, 1994; Sprung & Orlick, 1995; Talbot-Honeck & Orlick, 1995; and Zitzelsberger & Orlick, 1995). The success elements included in the model are belief, commitment, full focus, positive images, mental readiness, distraction control and constructive evaluation. Athletes in a number of sports have been studied in terms of their mental skills that are linked to excellence (e.g.,

Gould, Eklund, & Jackson, 1992a, 1992b; Loehr, 1983; Mahoney, Gabriel, & Perkins, 1987), however no study has looked specifically at taekwondo athletes.

As taekwondo is becoming the official sport in 2000 Olympics, it is important to look at the mental aspects of this sport scientifically. It is now widely agreed by athletes, coaches, and sport psychologists that mental factors are significant contributors to the outcome of physical performance (Diamant, 1991). Therefore, being mentally prepared for an important event is essential. In as much as few individuals are able to attain the highest level of sporting excellence, detailed qualitative information directly derived from experiences of exceptional athletes is essential to gain a better understanding of the nature of excellence (Martens, 1987; Streat & Roberts, 1992). Thus, the present study used the model of excellence described by Orlick (1992, 1995) as a framework to qualitatively examine the phenomenon of athletic excellence in elite Canadian taekwondo athletes. It was hoped that this study would provide insight into the nature and process of athletic excellence in a combat sport and draw out guidelines which may help athletes pursue their true potential.

Purpose of the Study

The primary purpose of the study was to determine how well Orlick's (1992; 1995) "Model of Human Excellence" applied to elite taekwondo athletes. This also involved determining whether elite taekwondo athletes identified any mental strategies which were not included in Orlick's model (1992, 1995). An applied goal of the qualitative research was to obtain practical information about the

mental skills employed by the elite Canadian Taekwondo Athletes and record their expertise in a comprehensive manner in order to supply developmental athletes with strategies which may help them develop their potential.

Operational Definitions

Taekwondo - TAE refers to the lower body, everything below the belt, particularly the legs (eg. running and jumping, strength and power, spinning and kicking). KWON refers to the torso and is concerned with everything done by the arms and hands (eg. striking and blocking, speed and snap). Together, TAE and KWON represent the physical aspects of Taekwondo. DO is the philosophical foundation of TAEKWON. It refers to everything from the neck up. It represents the spiritual nature of Taekwondo. It is concerned with the mind which in turn governs the body. Together, TAE, KWON and DO form a harmony of mind and body. There cannot be any separation of these elements (Lee, 1989). Students of taekwondo are expected to follow four basic tenets of behaviour. These tenets, in order of importance are courtesy, integrity, perseverance, and self-control.

Taekwondo has continued to increase in popularity on the international level. In 1975, the World Taekwondo Federation (WTF) became an affiliate of the General Assembly of the International Sport Federation. Taekwondo was then recognized as an official sport by the International Military Sport Council in 1976. Most importantly, the status of taekwondo will be elevated to that of an official Olympic sport by the International Olympic Committee in 2000.

Significance

Taekwondo events have become more popular in the Olympic setting especially since taekwondo was one of the Olympic demonstration events in the 1988 and 1992 Olympic Games and will be an official Olympic sport for the first time in the 2000 Olympics. Very few studies have been done in the field of combat sports. A better understanding of the mental skills of elite taekwondo athletes will assist in developing a more comprehensive body of knowledge relevant to the pursuit of excellence in a high performance combat sport.

The researcher's former experiences as an international taekwondo athlete, an Asian Champion, Malaysia state team coach and team leader leads her to believe that taekwondo is one of those sports where mental skills play an especially important role. A good taekwondo athlete during an average international tournament has to fight 6 to 10 bouts before reaching the finals. As time passes, and the athlete advances from one round to another, stronger and stronger opponents are left in the field. Athletes have to fight three minutes per round for three rounds and end a bout successfully to avoid elimination until the final bout of the competition. Due to the nature of the competition, light touches or less than powerful kicks or punches, do not count in taekwondo scoring. To score, the attacker must deliver a kick or punch with "trembling shock", and most points are scored with kicks rather than punches in this combat sport (Lucas, 1992). This requires not only excellent physical condition but also a very strong mental determination. Even a very slight change in mood might have a disastrous effect

upon the competitive results. Strength of opponents, increased strength of opponents in later rounds, unexpected losses, mistakes by those who judge a bout can cause constant changes in athletes' mental state.

A detailed investigation of the mental skills used by elite taekwondo athletes should provide new insight for sport psychology. Effective management of the psychological demands inherent to the taekwondo athlete may require well refined mental qualities and mental skills.

Review of Literature

Research on mental strategies in taekwondo is lacking. There are, however, a number of references which provided useful information or insight related to the purpose of this study. In examining psychological factors associated with athletic excellence, five areas of research were salient for this study including (a) research examining psychological characteristics of athletes; (b) mental skills and taekwondo (c) models of mental components of athletic excellence; (d) mental preparation and performance research; (e) preparatory arousal and precompetition routine investigations; and (f) mental factors related to success in other high performance domains.

A clarification of the concept of athletic excellence is first presented, followed by definitions of other mental aspects of performance.

Prior to discussing psychological factors related to athletic excellence, what is meant by excellence must first be identified. In spite of the use of the term excellence among sport psychology researchers, no clear definition of athletic excellence has yet been established. Rushall (1989) noted that "excellence is considered to be synonymous with performance enhancement, success, or improvement" (p. 165). Chambliss (1989) has defined excellence as "consistent superiority of performance" (p. 72). He explains that: "The excellent athlete regularly, even routinely, performs better than his or her competitors. Consistency

of superior performance tells us that one athlete is indeed better than another, and that the difference between them is not merely the product of chance" (p.72).

Cox (1990) suggested an operational definition of an elite athlete as "one who has achieved world-class or true professional status as in the case of Olympic qualifiers and professional sport players" (p. 37).

Even though an accepted definition of athletic excellence does not exist, those elements that appear to describe an athlete who can be described as successful include: consistent high level performance at an international level. This description of athletic excellence is applicable to studies in the following section which have elite or successful athletes as subjects.

Athletic Excellence Research

Psychological Characteristics of Athletes

A growing number of studies have attempted to identify psychological characteristics relevant to sport success. In the 1980s, studies on athletic excellence were conducted mainly through the administration of questionnaires, often asking participants to self-rate themselves on certain question items. Two examples are the Psychology Skill Inventory (Gould, Weiss, & Weinberg, 1981) a standardized questionnaire items which consisted of 17 factors mental skills adapted from Mahoney and Avener (1977) (Highlen & Bennett, 1979); and Psychological Skills Inventory For Sports (PSIS) (Mahoney, Gabriel, & Perkins,

1987). However, as Heyman(1982) commented, this type of research considered only a limited number of variables associated with sport success. During the last decade, researchers have come to rely more heavily on data derived from studies using interviews. One benefit of these studies is that the interview provides an opportunity to retrieve detailed information.

The majority of studies in this area investigated characteristics of elite athletes or successful performance, although some also examined other issues, such as sources of stress or enjoyment, development of talent, or practice (e.g., Bloom, 1985; Ericsson, Krampe & Tesch-Romer, 1993; Gould, Jackson, & Finch, 1993a, 1993b; Scanlan, Stein, & Ravizza, 1989). These studies examined such issues mainly in terms of mental states, mental skills, and/or mental strategies as opposed to looking at, for example, personality traits. Researchers investigating this area of study have utilized several methods, such as eliciting in-depth knowledge on successful performances from elite athletes, a comparison of successful/best versus poor/worst performances of elite athletes, a comparison between the very best performers and lesser performers, or a novice-expert comparison. The majority of the studies attempted to identify essential factors within a scope of competition-specific context (Ecklund, Gould, & Jackson, 1993).

One of the initial studies examining athletic success was conducted by Mahoney and Avener (1977). They administered a 53-item questionnaire, which

considered personality, self-concept, and strategies employed in training and competition, to 13 male gymnasts who were finalists in the Olympic trials. Their results showed that Olympic qualifiers coped well with mistakes, better controlled their anxiety, were more self-confident, had more positive self-talk, had more gymnastic related dreams, and used more internal mental imagery than nonqualifiers.

Meyers, Cooke, Cullen and Liles (1979) utilized a similar research design with racquetball players using a questionnaire which was a modification of that of Mahoney and Avenier (1977). The results were generally consistent in that psychological factors and cognitive strategies differentiated superior from less skilled athletes. It was also found that many of the specific relationships between skill level and cognitive variables that emerged from the Mahoney and Avenier data could be generalized from gymnasts to racquetball players.

Mahoney, Gabriel, and Perkins (1987) continued research into differentiating elite from non-elite athletes on the basis of mental skills. They conducted a questionnaire study with a large numbers of subjects, (n=729), including elite, pre-elite and non-elite athletes from 23 sports. Analyses revealed statistically significant differences between elite and non-elite athletes in six areas. Those six relevant mental factors were concentration, anxiety management, self-confidence, use of internal/kinesthetic imagery, focus on individual performance, and high

motivation to do well. Also using a questionnaire design, Duthie, Hope and Barker (1978) compared advanced taekwondo students with less advanced students and found that the former were more independent and confident and were willing to work harder than the latter.

Using an interview design as the means of data collection, Hemery (1986) conducted a study, of 63 exceptional athletes from several different sports. Their perspectives were recorded across a number of different questions dealing with physical, social, psychological, and moral factors related to athletic performance. Among the psychological factors discussed, the athletes talked about possessing a high degree of confidence. They also felt in control of their own destinies. Other factors mentioned were excellent concentration and the ability to compete with controlled emotion.

Gould and Weinberg (1985) interviewed wrestlers and found that successful collegiate wrestlers differed psychologically from their less successful counterparts. Successful wrestlers worried less often about coach evaluation, losing, and making mistakes. In particular, they exhibited more positive mood states.

Barbour and Orlick (1995) interviewed nine NHL Players' and found evidence of eight common elements of success. These elements included: what Orlick called: commitment, belief, full focus, positive images, mental readiness,

distraction control, constructive evaluation as well as fun and enjoyment, Nine Japanese elite athletes, mainly from judo, wrestling and gymnastics were interviewed to explore their mental skills (Imai & Orlick, 1995). Qualitative data analysis was carried out using inductive content analysis. Five general areas which had a relationship to success were identified: personal history, mental strategies, personal qualities of the athletes, nurturing and environmental variables.

Although based on experience as opposed to research, the following authors have also identified key mental skills for success. Harris and Harris (1984) identified a series of cognitive skills and strategies that athletes should master in order to maximize their sporting potential. These skills included : relaxation, concentration, imagery, self-talk and self-thoughts, goal-setting, communication, and avoiding obstacles. While the authors' thoughts on important mental skills are based on years of athletic experience, coaching and consulting with Olympic athletes, their list of skills lacks a scientific foundation.

Weinberg (1988) examined the key psychological skills required to be a successful tennis player. Weinberg based his propositions on his experience as a tennis player, coach and sport psychologist consulting with tennis players of all levels. Weinberg explained that, "The ideal mental state includes the following thoughts and feelings: highly confident; focused concentration; physically relaxed; effortless; automatic; in control; enjoyment-motivation" (p.22).

In contrast to the previously mentioned studies, Bloom (1985) examined excellence from a developmental point of view. Bloom and his associates conducted extensive interviews with high-level achievers from six different fields, including athletics. What Bloom found to be common among these highest achievers was an early exposure to success that developed confidence and competence, and a lengthy commitment to and or interest in their own pursuit. Bloom also emphasized the significant influence of social or environmental aspects in developing talent, such as support provided by family, roles and qualities of coaches, coaching styles, relationship with coaches, practice environment, and the role of teammates.

Another way of looking at excellence is less in terms of mental skills of elite athletes, and more in terms of the characteristics of successful performances (e.g., peak performances or best performances). A considerable number of studies examined the mental state of peak/flow performance or experience (e.g., Cohn, 1991; Csikszentmihalyi; 1975, 1990, 1991; Garfield & Bennett, 1984; Jackson, 1992; Ravizza, 1977).

Jackson (1992) interviewed 16 former U.S. national champion figure skaters and identified eight factors associated with flow experience: confidence, positive thinking, high motivation to do well, being relaxed, controlling anxiety, enjoyment, appropriate focus, and physical readiness.

Ravizza (1977) interviewed 20 male and female athletes from a variety of sports and levels of play about their subjective experience during their "greatest moment in sport". He found that many of the athletes experienced no real fear of failing, they had a narrow focus of attention, the performance seemed effortless, there was a feeling of being in complete control, and there was a total immersion in the activity. Upon further investigation of this phenomenon, Ravizza arrived at nine common characteristics of peak experience in sport. These characteristics included: no fear of failure; a sensation of being totally absorbed or immersed in the activity; a narrow focus of attention; and an effortless performance with the sensation of complete control while experiencing a time-space disorientation (time usually seeming to slow down). Finally, athletes reported the perception of the universe being integrated and unified, as if in some moment of special insight, with the experience being unique, temporary, and, involuntary.

A study by Loehr (1983), which identified ideal mental states of successful performance, exhibited similar results. In his study, 43 athletes from seven sports were asked to rate the level of their play immediately after a competition and to describe their internal psychological experience. They were also asked to recall their best and worst performances and to describe what their psychological experiences were like. Through systematic analyses, Loehr identified nine mental states of ideal performance, including: self-confidence, being focused in present,

feeling in control, enjoyment, optimistic, feeling energized but with inner calmness, heightened awareness, a feeling of effortless or automatic skill execution, and low anxiety. These items were generally consistent with other research on peak/flow performance.

Orlick and Partington (1988) surveyed 160 Olympians using a questionnaire both open and closed questions in which the athletes were asked to respond to how they were focused on before and during their performance competition at the Olympics as well as at their previous best international performance. Qualitative analyses revealed that the following aspects characterized their optimal mental state: full focus, high intensity, appropriate arousal, clear and ever-present awareness, no concern about distractions, confidence, determination, positive talk, and feeling in control.

Orlick and Partington (1988) also interviewed 75 Olympic athletes to identify elements of success. In the individual interviews, the athletes were asked to describe their attentional focus before and during the Olympics and previous best-ever international competitions. Through content analysis, Orlick and Partington (1988) identified certain aspects which were common among successful athletes. These included total commitment, quality training (extensive use of imagery training, simulation training, & daily goal setting), and quality mental preparation for competition (pre-competition plan, competition focus plan, competition

evaluation, & distraction control).

Similar findings were found by McCaffrey and Orlick (1989) who interviewed 14 top professional golfers and nine golf teaching professionals. A content analysis of the data demonstrated significant differences in 10 elements between top tour professionals and club professionals. Top tour professionals were more committed; had a high quality of daily practice; set goals; used imagery; established practice, pretournament and tournament plans; were better able to control distractions, performed post tournament evaluations and had a good understanding of what works and does not work for oneself.

Gould, Eklund, and Jackson (1992a, 1992b) interviewed 20 U.S. Olympic wrestling team members to examine mental preparation strategies, thoughts and affect occurring before and during competition, with regard to the best-ever and worst-ever performances to date. Content analysis identified that, at their best-ever performance, the athletes adhered to mental preparation plans or routines, were confident, focused, optimally aroused, and focused on tactical strategies. At their worst performance, they were not confident, had inappropriate feelings or task-irrelevant or negative thoughts, and had deviated from their preparation plan. Williams and Krane (1993) reviewed the literature related to mental aspects of peak performance or sport success and concluded that six characteristics appeared to be linked with successful performance. The characteristics are self-regulation

of arousal, self-confidence, concentration, feeling in control, positive preoccupation with sport, and determination or commitment.

Thus, the research on mental skills of athletes has shown that most successful athletes appear to have better control over their mental processes than their less successful counterparts. More specifically, whether one looks at characteristics of elite athletes (i.e., Olympic medalists and world champions) or characteristics of successful performances, some common elements of success can be described. These success elements include controlled imagery, commitment, confidence, precompetition plans, focus and refocusing plans, mental preparation for competition, and ongoing postcompetitive analyses. Athletes who performed at a higher level were determined to pursue their goals and overcome adversity and distractions.

Mental Skills and Taekwondo

A good taekwondo athlete during an average international tournament has to fight 6 to 10 bouts before reaching the finals. A bout consists of three rounds of three minutes each. An athlete must end a bout successfully to avoid elimination until the final bout of the competition. As the athlete advances, stronger competition is faced.

Due to the nature of the competition, light touches or less than powerful kicks or punches, do not count in taekwondo scoring. To score, the attacker must

deliver a kick or punch with "trembling shock", and most points are scored with kicks rather than punches in this combat sport (Lucas, 1992).

The demands of taekwondo suggest that well developed mental skills are important. Athletes are scored on the basis of the judgement of four judges. Athletes require an ability to switch focus and energy on during a bout, and mentally relax between bouts. They need to be able to sustain energy and focus for the duration of a tournament and to pace oneself so that there is enough of both left to be able to handle increasingly more experienced and tougher competition. Good distraction control skills are needed to compete in environment of many distractions - other fights are taking place around the competitor. An ability to quickly put away mistakes and unexpected losses is crucial. Even a slight change in mood might have a disastrous effect on the competitive results (Lucas, 1992). Therefore there appears to be a need for well developed mental skills but there is no literature on what skills appear to be most relevant.

Model of Mental Components of Athletic Excellence

Although a number of researchers have examined the psychological characteristics associated with athletic success, few have attempted to put these characteristics into a framework or model of excellence. The following section examines work done in this area, concluding with a description of Orlick's Model of Excellence (1992, 1995) which serves as the conceptual framework for this

study.

Loehr's (1983) "Athletic Excellence Training Model" was designed to enable athletes to create and maintain their "Ideal Performance State" (IPS) with greater consistency. Several hundred athletes were asked to report on their mental state during their "finest hour". These reports were studied to determine the common characteristics associated with peak performance. Loehr identified the following 12 aspects as characteristic of IPS: physically relaxed, mentally calm, low anxiety, energized, optimistic, enjoyment, effortless, automatic, alert, mentally focused, self-confident, and in control. The "Athletic Excellence Training Model" used a variety of psychological training procedures to help athletes accelerate their control of the IPS. The model was essentially a mental training guide for athletes rather than a complete framework of the mental skills of excellent athletes.

In study by Bota (1993), a psychometric instrument called the Ottawa Mental Skills Assessment Tool (OMSAT) was developed and validated which attempted to determine the relative importance of mental skills required to achieve levels of excellence in sport performance. Results of a revised version of the OMSAT demonstrated high levels of internal consistency (alpha levels above .78), and acceptable levels of test-retest reliability (r levels above .63).

A follow up study was done by Durand-Bush (1995) to create an enhanced version of the OMSAT (OMSAT-3), assess its psychometric properties, and

determine the relative importance of each mental skill presented in inventory. The OMSAT-3 was comprised of 85 questions, six questions of which measured social desirability, and 12 mental skills scales that were regrouped under the following three broader conceptual components: foundation skills, affective skills, and cognitive skills. Results indicated that both elite and competitive athletes scored highest on the commitment, the belief / self-confidence and the goal-setting scales. It appeared that athletes participating in this study were very committed individuals, possessed high levels of self-confidence, and set goals that guided their pursuit of exceptional performance. The commitment, belief / self-confidence and goal-setting scales formed the foundation skills component of the OMSAT-3 and were perceived as being the three most important mental components for reaching top level performance. The fact that athletes scored highest on these previously mentioned scales provides support to Orlick's (1992, 1995) model in which commitment and belief were conceptualized as core elements of human excellence. Although not made an explicit element in the wheel, goal-setting was also perceived by Orlick as an important underlying skill athletes need to develop. He suggested that athletes must first "believe in" and be "committed to" their set goals. OMSAT-3 scales did not yield good test-retest reliability estimates. In terms of validity, the OMSAT was found to significantly discriminate between competitive (e.g., provincial level) and elite level athletes

(e.g., national, Olympic level). This was a questionnaire study using both competitive and elite level athletes rather than an indepth interview for the mental strategies of elite athletes.

Orlick (1995) developed a model of excellence based on an immense volume of qualitative research and practical experience working with elite athletes and performers. The model consists of seven basic elements of excellence: commitment, belief, focus, positive images, mental readiness, distraction control, and constructive evaluation. Each of these seven elements plays an important role in the pursuit of excellence.

The foundation for this model was a study by Orlick and Partington (1988) involving the 1984 Canadian Olympic team, which provided solid evidence that mental preparation was a significant predictor of success. This relationship between mental preparation and performance excellence was established by gathering data on three readiness variables - physical, technical and mental. The results indicated that the highest and only significant predictor of final Olympic standings was the mental readiness variables ($r = .40$, $p < .0001$).

Interviews with successful athletes revealed the use of strategies such as precompetition planning, planning and focus for the competition, use of mental imagery, competition evaluation and distraction control.

Other research with athletes (Anderson & Orlick, 1995; Barbour & Orlick,

1995; Imai & Orlick, 1995; Kreiner-Phillips & Orlick, 1992; McCaffrey & Orlick, 1989; Orlick & Partington, 1986, 1988) resulted in establishing a list of elements which may allow humans to excel, or to "become the best they can be" (Orlick, 1993, 1995). The first two elements form the heart or "hub" of the wheel and are the core of human excellence, namely commitment and belief. As Orlick (1995) described them, together these concepts represent the "mental perspectives, orientations or visions about oneself and one's pursuit" that determine one's "willingness to persist in the face of challenges... and the extent to which one believes in oneself and the meaningfulness of one's pursuit"... (Orlick, 1995).

Orlick proposed the remaining five elements (the spokes of the wheel) as essential for the achievement of one's goal. These elements were positive images, full focus, distraction control, constructive evaluation, and mental readiness. These latter five elements of excellence are mental skills which translate commitment and belief into positive action, and make the wheel run smoothly and efficiently. Each of the seven elements of excellence is shown in Figure 1.

Figure 1

Orlick's (1995) Elements of Excellence:Commitment

The first element of Excellence centers around your commitment:

- *to excel
- *to be the best you can be
- *to do everything required to excel
- *to develop the mental, physical and technical links to excellence
- *to set clear personal goals and relentlessly pursue them
- *to persist in the face of obstacles
- *to give everything of yourself you can give

Belief

The second element of excellence centers around your belief, confidence or trust:

- *in your own potential
- *in the meaningfulness of your pursuit
- *in your focus
- *in your capacity to achieve your goal(s)
- *in your preparation or readiness
- *in those with whom you work or play

The steps to belief normally include

- *someone believing in you
- *thinking maybe you can
- *acting as if you can
- *believing you can
- *knowing you can
- *trusting you will

Full Focus

The third element of excellence centers around being fully focused:

- *for the duration of the performance, action or interaction
- *on the task at hand
- *in the moment
- *in the zone
- *on the performance
- *totally connected to learning, experience, or performing
- *on auto pilot or letting things unfold naturally

Positive Images

The fourth element of excellence centers on using positive images to:

- *dream big dreams
- *go after your dreams
- *follow a desired path or course of action
- *pursue specific targets or goals
- *prepare yourself to act and react in constructive ways
- *feel the flawless execution of desired performance skills
- *create positive feelings about yourself and your capacity
- *make connections
- *remain positive
- *enhance confidence
- *perform to your capacity

Mental Readiness

The fifth element of excellence centers on your mental readiness to:

- *create and take advantage of learning and performance opportunities
- *develop essential mental, physical, and technical skills necessary to excel in your pursuit
- *practice and prepare effectively, for example with full focus and intensity (usually accomplished through a positive attitude toward practice and a pre-practice mental readiness routine)
- *perform to capacity (usually accomplished with a commitment to follow an effective pre-performance routine to enter your best mental "zone" for quality performance)
- *follow a path that brings out the best in you and your performance
- *relax yourself and your focus away from the performance zone

Distraction Control

The sixth element of excellence centers on controlling distraction to:

- *maintain an effective focus
- *regain an effective focus when distracted, before, during or after a performance or experience
- *quickly re-enter "the zone" of high performance
- *perform consistently at a high level
- *stick with your own game plan
- *get adequate rest
- *stay on your own best path for personal excellence

Constructive Evaluation

The seventh element of excellence centers on constructive evaluation of training and performance situations to:

- *reflect upon what you did well
- *reflect upon what you can refine or improve
- *draw out important lessons from each experience or performance
- *assess the role of your commitment, attitude, mental readiness, and focus in relation to your performance outcome
- *target areas for improvement
- *act upon the lessons learned

Like Loehr (1983), Orlick's (1992; 1995) "Model of Human Excellence" was generated from an immense volume of qualitative research and practical experience working with elite athletes and performers. The Orlick model, however, represented a move toward a holistic theory of the mental skills required to excel in a variety of sports and other high performance domains. It therefore represents a good starting point from which to examine the mental skills of elite performers. The comprehensive nature of Orlick's "Wheel of Excellence" became clear by examining the mental skills that other researchers associated with elite athletes (Figure 2) and by recognizing that virtually all of the important skills identified by these researchers could fit into the seven elements of Orlick's model. Figure 3 illustrates the thorough nature of Orlick's model.

The use of a common framework allows for the sharing of experiential knowledge concerning concrete ways to nurture each of the mental links to excellence. Theoretically, Orlick's (1992) success elements could be applied in any demanding high performance pursuit. Figure 4 and Figure 5 illustrate the thorough nature of Orlick's "Wheel of Excellence" in other high performance domains.

Mental Skills Associated With Elite Athletes

<p>Mahoney & Avner (1977) Dream Frequency Self Verbalizations Mental Imagery Use "Anxiety" as Stimulant</p>	<p>Orlick et. al. (1979) Drive, Determination Self-Sacrifice, Team Player Copes well with Pressure Mature Coachable, Dependable</p>	<p>Loehr (1983) Physically Relaxed Mentally Calm Low Anxiety Energized, Optimistic Enjoyment, Effortless Automatic, Alert Mentally Focused Self-Confident In Control</p>	<p>Ravizza (1984) No Fear of Failure A Narrow Focus of Attention A Sensation of Being Totally Absorbed or Immersed in the Activity Effortless Performance Being in Control</p>
<p>Harris & Harris (1984) Concentration Relaxation Imagery Self-Talk Goal Setting Communication Avoiding Obstacles</p>	<p>Bloom (1985) Early Exposure to Success Developed Confidence/ Lengthy Commitment to or interest in pursuit Social Support</p>	<p>Hemery (1986) Athletic Intelligence Creativity Visualization & Imagery Concentration & Control Precompetition Planning Competitiveness The ability to get an edge</p>	<p>Nelson (1987) Commitment to Learning Clarifying Value of Sport Understanding Sources of Motivation Eliminating Motivation Inhibitors Acquiring Attitude Belief, Emotion Enhancing Performance Adhering to Effective Training Creating Supportive Environment</p>
<p>Mahoney, Gabriel & Perkins (1987) Concentration Anxiety Management Self-Confidence Mental Preparation Motivation</p>	<p>Orlick & Partington (1988) Quality Training Daily Goals Imagery Training Simulation Training Pre-Competition Focus Plan Competition Focus Plan Distraction Control Constructive Evaluation</p>	<p>Weinberg (1988) Focused Physically relaxed Effortless Automatic In Control Enjoyment-Motivation Highly Confident</p>	<p>McCaffrey & Orlick (1989) Commitment Confidence, Trust Quality Practice Goal Setting Imagery Practice Practice and Tournament Planning Tournament Focus Plan Distraction Control Tournament Evaluation</p>
<p>Botteril (1990) Relaxation Energizing Focusing, Refocusing Communication Concentration Visualization</p>	<p>Hallwell (1990) Self-Talk Relaxation Concentration Goal Setting Focusing, Refocusing Confidence</p>	<p>Cohn (1991) Temporary Phenomenon Narrow Focus of Attention Automatic & Effortless Immersed in Present In Control Self-Confident Absence of Fear Relaxed Fun or Enjoyable</p>	<p>Jackson (1992) Confidence Positive Thinking High Motivation to Do Well Being Relaxed Controlling Anxiety Enjoyment Appropriate Focus Physical Readiness</p>
<p>Gould et. al. (1992) Best: Adherence to Mental Preparation Confidence, Focus Optimal Arousal Tactical Strategy Focused Worst: No Confidence Inappropriate Feeling Task Irrelevant or Negative Thoughts Deviation From Preparation Plan</p>	<p>William & Krane (1993) Self-Regulation of Arousal Self-Confidence Concentration In Control Positive Preoccupation With Sport Determination, Commitment</p>	<p>Barbour & Orlick (1994) Commitment Belief Full Focus Positive Images Mental Readiness Distraction Control Constructive Evaluation Fun and Enjoyment</p>	<p>Orlick (1995) Commitment Belief Full focus Positive Images Mental Readiness Distraction Control Constructive Evaluation</p>

Figure 3

An Integration of Orlick (1985) and Mental Skills Associated with Elite Athletes

	Commitment	Belief	Full Focus	Positive Images	Mental Readiness	Distraction Control	Constructive Evaluation
Orlick (1985)	- Drive/Determination - Self-Sacrifice	- (Determination) - Self-Confident	- Mentally Focused - Alert - Automatic - Narrow Focus - Effortless Performance - Concentration	- Optimistic	- Mental Imagery - Self-Verbalization	- Copes Well with Pressure - In Control - Low Anxiety	
Orlick (1985)	- Interest In Pursuit - Early Exposure to Success	- Confidence/Competence - Social Support		- Imagery - Self Talk	- No Fear of Failure	- In Control - Immersed in Present - Avoiding Obstacles	
Orlick (1985)	- Commitment	- Highly Confident	- Competition Focus Plan - Automatic Focused & Concentration	- Visualization & Imagery	- Pre-Competition Planning	- Concentration & Control	
Orlick (1985)	- Commitment	- Confidence - Trust	- Tournament Focus Plan - Concentration	- Imagery Training	- Pre-Competition Focus Plan	- Distraction Control	- Constructive Evaluation
Orlick (1985)	- Motivation	- Self-Confidence		- Imagery Practice	- Practice and Tournament Planning - Mental Preparation	- In Control	
Orlick (1985)	- High Motivation To Do Well - Enjoyment	- Self-Confidence	- Narrow Focus of Attention - Automatic			- Distraction Control - Anxiety Control	- Tournament Evaluation
Orlick (1985)	- Determination/commitment	- Confidence	- Appropriate Focus	- Positive Thinking - Being Relaxed		- Immersed In Present - In Control	
Orlick (1985)	- Commitment - Enjoyment	- Belief	- Full Focus	- Positive Image - Preoccupation With Sport	- Mental Preparation Plan/routines - Optimal Arousal	- Controlling Anxiety	
Orlick (1985)					- Self-Regulation of Arousal	- In Control	
Orlick (1985)					- Mental Readiness	- Distraction Control	- Constructive Evaluation

Figure 4

Mental Practice In Other High Performance Domain

Loehr & McLaughlin (1980)-business Person & Athlete Positive Attitude Focusing Distraction Control Motivation Visualization Breathing Control Humour	Pines (1980) - Management Positive Attitude Commitment, Control & Challenge	Boyd (1992)- Rock Music Recognizing One's True Gift Taking Chances Concentration Spend Time Alone Faith Encouragement
Ness & Molo (1992)- Management Commitment Single-Mindedness Refocusing Teamwork Relaxation	Talbot-Honeck & Orlick (1995) Classical Musician Commitment Belief Full Focus Positive Images Mental Readiness Distraction Control Constructive Evaluation Spontaneity & Creativity & Flexibility Enjoyment	McDonald & Orlick (1995)-Surgeon Commitment Belief Full Focus Positive Images Mental Readiness Distraction Control Constructive Evaluation
Sprung & Orlick (1995) -Astronaut Commitment Belief Full Focus Positive Images Mental Readiness Distraction Control Constructive Evaluation		

Figure 5
An Integration of Orlick (1995) and Mental Skills Associated With Other High Performance Domains

	Commitment	Belief	Full Focus	Positive Images	Mental Readiness	Distraction Control	Constructive Evaluation
Pinow (1990) (Team Commitment)	- Commitment - challenge				- Positive Attitude	- Control	
Griffin Locke (1997) Barnett (1997) Barnett (1997)	- Motivation - Humour		- Focusing	- Visualization	- Positive Attitude	- Distraction Control - Breathing Control	
James & Jones (1992) (Team Commitment)	- Commitment	- Team Work	- Refocusing - Single Mindedness		- Relaxation		
Borg (1997) (Team Commitment)		- Recognizing One's True Gift - Faith - Encouragement	- Concentration		- Taking Chances	- Spend Time Alone	
Thompson Orlick (1995) Gardner (Mental Team)	- Commitment - Enjoyment	- Belief	- Full Focus	- Positive Images	- Mental Readiness - Spontaneity, Creativity, Flexibility	- Distraction Control	- Constructive Evaluation
Spillars & Orlick (1995)	- Commitment	- Parental Influence	Focus On Task	- Mental Imagery - Mental Rehearsal	- Preparation & Planning	- Distraction Control - Stress Control	- Use of Checklists - Evaluation - Learning From Experience & Others
McPherson Orlick (1995)	- Commitment	- Belief	- Full Focus	- Positive Images	- Mental Readiness	- Distraction Control	- Constructive Evaluation

Mental Preparation and Performance

Mental preparation refers to the types of mental skills used to prepare preparing for competition (Hemery, 1986). For example, Kerrin Lee-Gartner, a gold medalist in women's downhill ski racing, stated "Mental preparation means years and years of mental preparation. It's a part of my everyday life. If I'm hanging a picture in the living room, first I imagine where I want it, then I imagine how far away I want it from the wall. I can see it all very clearly. Then I hang the picture, and it's in the right spot. I think that's a very simple example of what I can do when I ski, but when I ski I'm doing something dangerous. I'm doing something that I want to do very badly. It's not worth making a mistake, so I have to use imagination and my imagery constantly throughout the whole year" (Orlick, 1993; p. 111). As the mental skills of an athlete are related so strongly to athletic success, mental preparation for competition must be considered an important part of an athlete's training. The idea that much of how an athlete performs depends largely upon how well he or she is prepared for the performing moment is common in the sport psychology literature. The following section reviews the literature related to mental preparation to elite athletes.

Hanson (1992), examined the mental aspects of hitting in baseball through a case study of the great hitter, Hank Aaron. The intent of the study was to gain a better understanding of how an hitter thinks about hitting and to extend the

experience of the researcher and readers in the area of the mental aspects of hitting. "Hank's mental approach to hitting, which he felt separated him from other major league hitters, consisted largely of preparing mentally for each game by visualizing himself facing the next games' pitcher in a variety of game situations. His visualization, done from an internal perspective, led to being in tune with how the ball is likely to come at him, or in other words, it helped him be focused. He followed his visualization regime each day, a practice to which he attributed his amazing consistency (Hanson, 1992; p.66).

Orlick and Partington (1988), concluded that mental preparation was a distinguishing feature between the successful and unsuccessful athletes they studied. They conducted a study in which they interviewed a total of 75 male and female Canadian Olympic athletes who competed in the 1984 games and found that successful athletes were better in terms of total commitment to pursuing excellence, quality training, and quality mental preparation for competition.

A study by Gould, Eklund and Jackson (1992a) involved extensive interviews with all 20 members of the 1988 U.S. Olympic Wrestling Team about their performances in the Seoul Olympics. Mental preparation strategies, precompetition cognition, and affect were examined by having the wrestlers respond to a series of questions about their all-time best match, their worst Olympic match, and most crucial Olympic match. Considerable consistency was

found across the wrestlers' responses regarding all-time best Olympic matches whereas striking differences were found between the best and worst matches. For example, before best matches, wrestlers followed mental preparation plans and routines and were extremely confident, totally focused, and optimally aroused. They also focused on clear tactical strategies. Before worst matches, wrestlers were not confident, had inappropriate feeling states and experienced many task-irrelevant and negative thoughts, and deviated from preparation plans. In examining the mental preparation strategies, it was found that even though there was uniformity among the medalists in the application of preperformance routines, there was considerable individual variation within this group of highly successful competitors in the complexity and composition of routines or strategies across medalists.

The importance of mental preparation is not only limited to the striving for success but also to the maintenance of success once achieved. Kreiner-Phillips and Orlick (1993) found that athletes who have high level success need mental skills to deal with the demands of winning and success. Those demands included, for example, increased media interest, speaking obligations, high expectation of sponsors etc.. Approximately one third of athletes interviewed had coped well with their additional demands and continued to win while the remaining two thirds did not handle the additional demands as well and either never repeated their

winning performance or took a significant amount of time to do so. Therefore mental strategies in preparing champions to handle the pressure and demands of winning are needed.

In summary, taken collectively, studies investigating the association between mental skills and athletic performance indicated that optimal performance states have a basis in good mental preparation. Elite athletes differ from lesser skilled athletes in the degree to which they prepare for events and adherence to mental preparation plans.

Preparatory Arousal and Precompetitive Routines

One specific area of mental preparation which has been shown to be critical to performance is preperformance routines. These physical and mental preparation strategies have reportedly been employed by athletes in closed skill sports as well as open skill sports. The mental portion of preperformance routines generally include a number of strategies such as relaxation, visualization, cognitive restructuring, self-talk, and decision-making processes (Cohn, 1990). The routines are performed immediately prior to motor skills execution. Evidence has accumulated demonstrating that mental preparation can influence subsequent physical performance (e.g., Gould, Weinberg, & Jackson, 1980; Shelton & Mahoney, 1978; Weinberg & Seabourne, 1985) and that the preperformance routines of elite athletes differ from lesser skilled athletes (e.g; Crews & Butcher,

1986a).

Gould, Weinberg and Jackson (1980) examined the effects of mental preparation, or psyching up, on the performance of an isokinetic leg exercise on a cybex machine performed by male undergraduate students. Two experiments were conducted to determine if different mental preparation strategies produced differential strength performance and whether arousal was the major mediating variable explicating this relationship. Fifteen males and fifteen females subjects performed under five different mental preparation conditions in a 2x5 (gender by mental preparation strategy) Latin square design. Routines including attentional focus, preparatory arousal, a control-rest condition, self-efficacy statements, and imagery. The findings revealed that the preparatory arousal and imagery techniques produced the greatest change in facilitating performance.

The efficacy of mental preparation routines has also been supported in more ecologically valid field settings. For example, in examining the preshot routines of Ladies Professional Golf Association players via descriptive behavioral assessments, Crews and Boutcher (1986a) found that for better performing players the content of their routines was consistently followed and the time taken to their routines showed little variability.

To further investigate those observations, Crews and her associates conducted three additional studies of golfers' mental preparation routines assessing the

effectiveness of teaching golfers to utilize mental preparation routines (Boutcher & Crews, 1987; Crews & Boutcher, 1986a, 1986b). Crews (1990) concluded that preshot routines facilitated consistency in preperformance behavioral patterns and possibly an improvement in performance for players who are beyond the beginning level of skill development.

Eklund, Gould, and Jackson (1993) demonstrated that Olympic medal winning wrestlers were more aware of their optimal feeling states for peak performance than non-medal winners and made efforts to achieve these states for each match by consistently adhering to systematic pre-performance routines.

Although these differences between medal and non-medal winning wrestlers are notable, it is of critical importance to recognize that striking individual variation was also evidenced among these elite athletes even within the medal and non-medal winning subgroups. The emergence of these salient individual differences reinforces recent calls in the applied sport psychology literature stressing the importance of individualizing elite athlete consultations. Indeed, the importance of recognizing individual differences in the provision of sport psychology services has been a central thesis in the writings of a number of highly respected sport psychologists (e.g., Botterill, 1990; Halliwell, 1990; Orlick, 1989).

In summary, then, it has been experimentally demonstrated that preparatory

organization of cognitive content can positively influence subsequent performance. Further, experimental research in the laboratory (e.g., Gould, Weinberg, & Jackson, 1980) and in the field setting (e.g., Boutcher & Crews, 1987) suggested that preperformance routines may facilitate performance. The ecologically valid evidence provided by Crews and Boutcher (1987) substantiated laboratory investigations, although clearly factors such as skill level and situational variables may influence this relationship. The studies by Crews and Boutcher were limited to closed-skill performance, but Cohn (1994), after reviewing relevant theoretical perspectives and empirical evidence, argued that preperformance routines may also have applicability to open-skill performance, that is, sports where the performer must respond to a changing environment (e.g., tennis, soccer, and combative sports).

Mental Practice in other High Performance Domains

Researchers in other fields are looking at excellent performances in their fields and attempting to discover what characterizes a successful performer from a psychological point of view. Learning about excellence in other fields may provide us with additional elements of excellence not found in sport research, but which may also be valid for athletes.

The use of mental practice has expanded into many fields of human experience including medicine. McDonald and Orlick (1995) studied the mental

strategies used by top surgeons. Thirty - three highly proficient surgeons were interviewed. Of the three dimensions of physical, technical and mental readiness, the surgeons rated mental readiness as important to an operation's success as technical readiness. As in the Orlick and Partington (1988) study, the results from this study indicated that mental readiness was the factor that showed the most significance between surgeries judged to be successful and those felt to be disappointing. Other mental skills considered important to success in surgery were belief, commitment, full focus, positive images, distraction control, and constructive evaluation.

Literature relating to success in business demonstrated a similar respect for the importance of mental strategies in achieving success. In 1980, a study of 400 successful executives and 400 unsuccessful executives indicated that positive attitude was the feature that distinguished the two groups in terms of how they handled stress (Pines, 1980). Successful executives also exhibited qualities of commitment, control and approaching difficult situations as challenges. These who had difficulty handling stress did not show these qualities.

Loehr and McLaughlin (1986) did a study with business persons and athletes. Through the collected data and their workshop and consulting experience, they developed a model of ideal performance. Included in this model are positive attitude, focusing, distraction control, motivation, visualisation, breathing control,

and humour.

Ness and Molo (1992) discovered interesting parallels between sport and music, at least from the performance end of the music business. "John Molo is a professional drummer who has succeeded in living his dream. He worked the system and had to seize opportunities wherever they existed rather than focus on closed doors. Besides commitment, another key factor in turning his dream into reality was single-mindedness. Many of the related sport issues that Molo talked about such as refocusing, teamwork, relaxation, all relate directly to the fulfillment of his purpose" (p.138).

Boyd (1992) found similar feelings in her study of successful rock musicians. "In the words of musicians, we've seen that there are several factors involved in actualizing one's creativeness: recognizing one's true gift, taking chances, developing the ability to concentrate, spending time alone to let the mind wander, and learning to have faith in oneself and one's true expression, which encouragement from others can help to nurture" (p.253).

Talbot-Honeck and Orlick (1995) have done a related study on 16 elite classical musicians from six countries. The Interview method was used to explore and document the musicians' mental readiness to excel and to assess the relevance of Orlick's model of excellence (1992; 1995) to musical excellence. Five of Orlick's components were found to be common among elite musicians: an

extremely high level of commitment, a clear focus on the music, an ability to refocus, highly developed imagery (or visualization) skills and constructive performance evaluation. The musicians did not have very specific or detailed mental preparation plans for practicing or for performing; they preferred to follow general guidelines. Four qualities were added to the list of skills of qualities required to excel in music: enjoyment, spontaneity, creativity and flexibility. Other determining factors in the musicians' level of excellence were the nature of their goals, the perspective they carry into their musical endeavours and their abiding love and enjoyment of music (Talbot-Honeck & Orlick, 1995).

The literature reviewed in this section suggests that there may be common elements of excellence that appear to be valid across domains. Some of these elements include: commitment or single mindedness, belief or faith in oneself, imagery, distraction control, an ability to concentrate, self evaluation and the importance of preparation. The review literature also mentions skills not specifically referenced in the sport research: having a sense of humour, challenging oneself, recognizing one's gift, creativity, spontaneity and flexibility. As the body of sport research grows, some of these elements may be also found as important to athletic excellence.

In conclusion, the review of literature indicates that there is growing body of research on psychological characteristics of elite athletes, on characteristics of

successful performances and on models of excellence. Much of this research, however, is general-not sport specific. There is a lack of research dealing with combat sports.

That the mind is important in combat sports cannot be denied. Christensen (1989), a martial artist, stated that, "mental skills are basic to any physical endeavour that requires speed, power and coordination of the mind and body. For any martial artist looking for the mental edge, mental preparedness encourages alertness and the development of a fight plan" (p.1). This study aims to enhance our knowledge of excellence in a sport specific context, taekwondo, by utilizing Orlick's Model of Excellence (1995) as a framework. Orlick's (1995) model has been selected as it represents the most encompassing description of the factors linked to excellence to date.

Methodology

Qualitative research and analysis procedures have becoming increasingly prevalent in sport, physical education, and sport psychology, in hopes of gaining a better understanding of human behaviour in these contexts (Martens, 1987; Côté, Salmela, Baria & Russell, 1990). Qualitative research is the idiographic approach involving a method of inquiry in which the researcher plays an active role in seeking out the subject's experience and knowledge about the circumstances under observation, through in-depth interviews and subsequent content analysis of the transcripts (Hanson & Newburg, 1992; Striegel, 1992). This particular method has been used extensively in the field of sport psychology in particular in determining mental strategies of athletes in the past several years (Orlick, 1992; Orlick, 1993; Orlick & Partington, 1988). This approach was followed for this study.

Subjects

Subjects in the study were national champions and international medalists in taekwondo who represented Canada in the international events over the period of 1988-1995. Interviews were conducted with top Canadian taekwondoists who have won medals in prestigious international events such as Olympics, World Games, World Cup, World Championship, World University Championship and World Military Championship.

Ten Subjects and their coaches were contacted by letter outlining the purpose of the study and requesting an interview (Appendix D). All of those contacted agreed to participate. Addresses and telephone numbers were obtained from the coaches and personal contact with the athletes. The letter guaranteed the subjects confidentiality and consent forms were issued to all subjects (Appendix C). A questionnaire study was also conducted with the nine interview subjects and an additional 20 athletes.

Instruments

Two assessment measures were developed for the purposes of this study: The Taekwondoist Interview Guide and The Mental Aspects of the Top Canadian Taekwondo Athletes Questionnaire.

Taekwondoist Interview Guide. This qualitative study was neither naturalistic, as described by Hanson and Newburg (1992) nor interpretational, as explained by Cote, Salmela, Baria and Russell (1993). Rather, a structural approach was taken, based on the components of Orlick's "Wheel of Excellence" (1992, 1995). The task of the researcher was to "retrieve and make sense of that information throughout the data by working with a set of relationships whose nature is well established" (Cote, Salmela, Baria & Russell, 1993).

The "Taekwondoist Interview Guide" was developed specifically for the

purpose of this research. The interview guide was created based on the "Athlete Interview Guide" with Olympic athletes by Orlick and Partington (1988) and Hemery's (1986) "Review of Questions". Orlick and Partington's interview guide served as a model for questions concerning the mental aspects of practice and competition, as well as a guide for drawing out reflections on best and worst performances. The "Taekwondoist Interview Guide" contained all of the core questions that were in the "Athlete Interview Guide". Hemery's interview guide was valuable for questions which probed into the evolution of talent and a performer's early sporting experiences. Probing questions, not written in the guide, were occasionally presented to subjects in order to obtain a more detailed explanation of a topic area (Barbour & Orlick, 1995).

The "Taekwondoist Interview Guide" utilized a semi-structured interview protocol. In order to prepare for the interviews with the subjects involved in this investigation, the researcher conducted and analyzed pilot interviews with two taekwondo athletes and one coach. These interviews demonstrated that, given some minor adjustments, the interview guide was an effective instrument to elicit detailed responses, and reinforced the researcher's confidence in the interview technique. The interview approach was considered most appropriate because it allowed the researcher to follow leads from the interviewee, and probe for detailed information about mental preparation strategies used by Canadian taekwondo

athletes (Imai & Orlick, 1995).

Mental Aspects of Top Canadian Taekwondo Athlete Questionnaire.

The subjects were asked to complete "The Mental Aspects of Top Canadian Taekwondo Athlete Questionnaire" (Appendix B) which was based on a questionnaire created by Barbour and Orlick (1995) to evaluate the components of Orlick's (1992) model of human excellence. The survey questionnaire elicited the following information: demographic data of the athletes, age started, age became serious, numbers of years of involvement, as well as self-ratings on Orlick's seven major elements of excellence. Each mental skill was presented with a short description or definition. The athlete was then presented with two 10 point Likert scales, the first to rate the importance of that mental skill for top Canadian taekwondo athletes and the second to self-rate either their ability or use of that mental skill.

After completing two pilot interviews it was felt that "creativity and spontaneity" was an important additional mental factor for top taekwondo athletes. This factor was then added and became the eighth mental skill to the "Mental Aspects of Top Canadian Taekwondo Athletes Questionnaire". The questions on "creativity and spontaneity" were presented in the same manner as the previous seven elements to ensure continuity in format. This addition to the questionnaire was included prior to the revision of Orlick's model (1995). Creativity and

spontaneity are discussed as subcomponents of one of the main elements in the new model (Orlick, 1995).

Procedure

Interview. This investigation incorporated the use of qualitative data collected through in-depth interviews with taekwondoists. The interviews lasted one to two hours and the follow up call (when necessary) lasted no more than half hour.

Four out of ten subjects were contacted with a follow up call for clarification. All interviews were tape recorded, and a copy of each transcript was sent back to the subject for verification and for alteration or addition of comments if desired.

Text portions extracted for analysis have identifying characteristics such as name, gender, dates and specific details removed to guarantee subject anonymity. Only nine interviews were used for analysis as the tenth yielded unusable data (e.g., subject answered only "yes" or "no" to questions).

Questionnaire. All of the interview subjects were asked to complete the "The Mental Aspects of Top Canadian Taekwondo Athlete Questionnaire" at the end of the interviews. The questionnaire was completed at this time to ensure that the mental skills identified in the survey did not influence the interviewee during the interview. In order to expand the survey size, the researcher administered the questionnaire to the medalists at the 1995 Canadian National Championship. Twenty five questionnaires were given out to the athletes and twenty were

returned to the investigator.

Data Analysis

Qualitative analysis. The qualitative data analysis was carried out in two major steps. The first step was to determine how well Orlick's (1992) "Model of Human Excellence" could be applied to top taekwondo athletes. The second step was designed to determine if top taekwondo athletes identified any mental skills which were not included in the Orlick's model. The first step involved deductive analysis. The data organization stage involved decontextualizing each transcript by breaking it into representative quotes which illustrated the major components of Orlick's model while the second step involved conducting an inductive content analysis on the remaining parts of the transcripts, (i.e., those parts which did not fall within Orlick's seven elements by excellence) (Barbour & Orlick, 1995). This analysis followed the guidelines outlined by Côté, Salmela, Baria and Russel (1993).

Quantitative analysis. The responses to the "Mental Aspects of Top Canadian Taekwondo Athletes Questionnaire" were analyzed quantitatively. A series of means and standard deviations were conducted to determine :

1. the athletes' opinions as to the relative importance of each of the mental skills and
2. the athletes' self-ratings of their command of each of the mental skills.

These analyses were conducted to corroborate the relative importance of each element of Orlick's (1995) model.

Assessing "Goodness" of Study

There were several methodological considerations that were taken into account in the whole process of this study. At the end of the research, "goodness" of research was assessed, mainly based on Miles and Huberman's (1994) guidelines. Assessment focused on the following six notions: credibility, objectivity, reliability, generalizability, practicability, and ethical concerns.

Credibility

Credibility is defined in terms of accuracy or truth value of collected data and study findings (Guba & Lincoln, 1981; Miles & Huberman, 1994). Several methods that assured credibility of the study are listed below. Since credibility of the study could be assessed and assured in terms of data collection, data interpretation, and overall aspects of study, those strategies were presented corresponding with these aspects.

Data collection

- a) Participation in the study was on a voluntary basis, reducing the chance of irresponsible responses due to enforced interviewing (Gould, Jackson & Finch, 1993b).
- b) All interviews were conducted on a one-on-one basis to eliminate additional observer effect (LeCompte & Goetz, 1982).

c) Efforts were made to establish rapport and trust between the researcher and study participants, in order to facilitate a free expression of their opinion and insights (Patton, 1987). Interviews were mainly conducted in a place of familiarity and comfort to the athlete (e.g., training gym). All interviewees recognized the interviewer as an individual familiar with their sport.

d) Both researcher and participants had an opportunity to clarify the questions and responses. The participants were asked to give specific examples when the researcher felt uncertain about what was said (Patton, 1987).

e) All the interviews were tape recorded and transcribed verbatim (LeCompte & Goets, 1982).

f) Transcribed interviews were returned to participants to verify the accuracy of the information (Orlick & Partington, 1988).

Study findings

a) Findings were thoroughly described in terms of specific contexts and situations so that reviewers would be able to judge its accuracy (Miles & Huberman, 1994).

b) Findings were grounded in athletes' experiences and insights studied were supported by their own quotes. The information was context-rich and thick (Strauss & Corbin, 1990).

Overall

a) Assessing "goodness" of the study itself could enhance the quality of study.

Objectivity

Objectivity is defined in terms of neutrality or the degree of researcher's bias (Locke, 1989; Miles & Huberman, 1994). Although it was impossible to

eliminate all the researcher's bias in qualitative research where the researcher is the primary instrument of investigation in data collection and analysis (Guba & Lincoln, 1981), it was possible to minimize bias in several ways. These ways are listed as follows in terms of three aspects: data collection, data analysis, and overall aspects.

Data Collection

- a) An interview guide was utilized to collect basically the same types of data from different participants (Patton, 1987).
- b) Any form of leading questions was avoided (Patton, 1987).

Data analysis

- a) Systematic data analysis procedures, in the way described earlier, were adhered to (Strauss & Corbin, 1990).
- b) All the data units relevant to the goal of the study were taken into account in analysis, and all participants were counted in descriptions of each topic area.
- c) The researcher periodically stepped back from the analyzed data and re-examined the data at a later date (Strauss & Corbin, 1990).

Overall

- a) Theoretical sensitivity was increased through consulting the existing scientific knowledge (Strauss & Corbin, 1990).
- b) An awareness that biases exist in itself may help limit biases.
- c) Methods and procedures of data collection as well as analysis were explicitly described so that other researchers may judge threats to objectivity (Miles & Huberman, 1994)

Method of Establishing Trustworthiness (Reliability)

The underlying issue of reliability is "whether the process of the study is consistent, reasonably stable over time and across researcher and methods" (Miles & Huberman, 1994). Two processes were used to establish reliability: triangulation of the data and member checking. Triangulation refers to the use of multiple sources to obtain the same information. In this case questionnaires were used along with interviews and supported the interview findings.

Member checking is a process by which the subject verifies the researcher's summary and conclusions of the interview to make sure that the information gathered from the interview was authentic (Lincoln & Guba, 1985). In the present study, this process involved asking the subjects to corroborate the overall interview transcript. No written transcripts were returned, however, verbal confirmation of the accuracy of transcripts was received from all the subjects.

Data Collection

- a) The instrument (interview guide) was developed based on an interview guide created and successfully utilized by other researchers to elicit elite athletes' insights (Orlick & Partington, 1988).
- b) The researcher familiarized herself with effective interview techniques and procedures through reading relevant literature as well as conducting pilot interviews (Janesick, 1994; Patton, 1987).
- c) The criteria for selection of study participants were carefully chosen based on the existing knowledge in the domain (Strauss & Corbin, 1990).

Data Analysis

a) All the study findings were reviewed by two researchers who were both familiar with the study area and qualitative research methods. The interview transcripts were reviewed by the researchers who ensured that the investigator complied with the interview guide. They were asked to check whether consistency/inconsistency existed between each of the identified themes/categories and supporting quotes. Given that thorough descriptions of athletes' experiences and insights were presented in each topic area, the reviewers reported that they were congruent.

Overall

a) Research questions were clearly outlined, and the appropriate research method was selected with respect to the goal of the study, while considering theoretical sensitivity (Miles & Huberman, 1994).

b) Study data were retained and are available for reanalysis by other individuals.

Generalizability

Generalizability is defined in terms of "whether the findings of a study hold up beyond the specific research subjects and the setting involved" (Bogdan & Bilken, 1992). LeCompte and Goetz (1982) argued that in qualitative research even the most exact replication of research methods may fail to produce the identical results due to the changes in contexts or circumstances within which the research are undertaken. Also, because the goal of qualitative research is typically to examine uniqueness or complexity within a specific group of individuals studied, generalizability of findings to other subjects or contexts is often not the qualitative researcher's central concern (Bogdan & Bilken, 1992). Nevertheless,

issues of generalizability could be assessed in this study as follows:

- a) The characteristics of the study sample, study settings, and methods and procedures of data collection as well as analysis were explicitly described. This provides other researchers with the means for judging the transferability if they wish to apply the same study method to their own study context.
- b) Results, containing thick descriptions, should allow other researchers to assess the potential transferability.

Practicability

The issue underlying practicability is a question of the extent to which the study findings can be usable and applied to individuals in the field (e.g., athletes, coaches, sport Psychologists), and /or stimulate researchers in the domain to future action. Miles and Huberman (1994) argued that the question of practicability or "pragmatic validity" is an essential addition to more traditional views of "goodness" of research.

- a) This study (interview) helped participants with respect to recall clarity of performance factors, learning, well-being, and/or potential development of their skills. Athletes commented after the interviews that the interview helped them become more aware of the importance of mental aspects or to re-evaluate the mental aspects of their sports. This was immediately practicable (Lincoln, 1990).
- b) Since findings contain practical expertise and wisdom of high achievers based on their own experiences, this may be helpful for other developing athletes.
- c) The findings may possible stimulate "working hypotheses" to guide future research avenues or action (Miles & Huberman, 1994).

Ethical Concerns

Ethical concerns refer to "judgements made about the worth, legitimacy, or goodness of actions or meanings" (Miles & Huberman, 1994; P. 280). In this study, the following guidelines were adhered to:

- a) Confidentiality of data and anonymity were assured.
- b) Special attention was paid not to make the study participants feel "used". They were given feedback by sending transcripts, promising that a summary of the findings would be sent if desired when the study was completed, and by having the researcher show up at competitions.
- c) The interview process and subsequent interaction with participants was respectful and demonstrated a belief in the worth and value of their knowledge.

Results and Discussion

This chapter consists of three main parts: 1) participant demographics; 2) the interview study; 3) the questionnaire study.

Participant Demographics

Nine athletes were selected for the interview study and also took part in the questionnaire study. Their ages ranged between 22 and 44 years old at the time of the interviews. Eight of them were single and one was married. In terms of educational background, three subjects were high school graduate, four were college or university graduates and two were currently college students. Two of the interview subjects were retired athletes; one retired about two years ago, the other one about a year ago. The rest were currently active. (See Table 1.)

Subjects in the questionnaire study won at least one major national championship. There were twelve males and eight females. Their ages ranged from 17-34 years old. Fourteen subjects were single, five subjects were married and one subjects was divorced. In terms of educational background, four subjects pursued a university degree or college diploma respectively while 12 were high school graduates. Four of the subjects were still pursuing their education with two in college and two in university. Comparative analysis between males and females was not conducted in this study due to small and unequal numbers of subjects. All of the subjects in questionnaire study were currently active

competitors. (See table 2.)

Table 1
General Demographics of Interview Study

Number of Subjects		9
Gender	Male:	7
	Female:	2
Age at the time of interview	Range:	22-44
	Mean:	27.2
	S. D. :	5.1
Marital Status	Single:	8
	Married :	1
	Divorced:	0
Educational Background	High School Graduate:	3
	College or University:	4
	Current High School Student:	0
	Current College Student:	2

Table 2
General Demographics of Questionnaire Sample

Number of Subjects		20
Gender	Male:	12
	Female:	8
Age at the time of Questionnaire Study	Range:	17-34
	Mean	22.8
	S. D. :	4.9
	Single:	14
Marital Status	Married:	5
	Divorced:	1
	High School Graduate:	12
Educational Background	College Or University:	4
	Current High School Student :	4
	Current College or University Student :	0

With regard to taekwondo background for interview participants (see table 3), the age started fell in a range between 5 to 20 years; the mean being 11.5 years. The age athletes became serious in taekwondo ranged from 10-22 years with a mean of 16.1. In terms of years of taekwondo training and involvement in the sport to date, the range was from 7 to 25 years, with the mean at 14.3 and standard deviation at 4.4.

Table 3
Demographics Related to Taekwondo Background-Interview Participants

Age Started	Range: 5-20 Mean : 11.5 S.D. : 3.9
Age Became Serious	Range: 10-22 Mean : 16.1 S.D. : 4.2
Years of Involvement	Range: 7-25 Mean : 14.3 S.D. : 4.4

For the questionnaire participants (who also included the nine interviewees), the age started ranged from 5-26 years; the mean being 13.2 years (see table 4). The age athletes became seriously involved in taekwondo ranged from 10-27 years with a mean of 17.4. In terms of years of taekwondo training and involvement in the sport to date, this ranged from 4 to 24 years, with the standard deviation at 5.89 and the mean falling at 12.1.

Table 4
Demographics Related to Taekwondo Background-Questionnaire Participants

Age Started	Range: 5-26 Mean: 13.2 S. D. : 4.5
Age Became Serious	Range: 10-27 Mean: 17.4 S. D. : 4.6
Years of Involvement	Range: 4-24 Mean: 12.1 S.D. : 5.1

Interview Study

The first purpose of the study was to determine how well Orlick's Model of Excellence (1995) applied to taekwondo athletes. The deductive qualitative analysis of the interview transcripts revealed that all of the subjects referred to using all seven of Orlick's (1995) elements of excellence. The second purpose of the study was to look for elements not contained in the Orlick model but which taekwondo athletes considered important. The results of these analyses are presented in the following section.

The Model of Excellence (Orlick, 1995) and the Mental Skills of Taekwondo Athletes

Orlick (1995) described seven mental skills that are associated with elite athletes. All of the nine athletes reported that they used these skills (see Table 5).

Each component is discussed in the following section and is illustrated by quotations drawn from the interview transcripts of the taekwondo athletes.

Table 5
Number of Taekwondo Athletes Referring to the Seven Mental Skills Related to Excellence (Orlick, 1995)

Commitment	9 (100%)
Belief	9 (100%)
Full Focus	9 (100%)
Positive Images	9 (100%)
Mental Readiness	9 (100%)
Distraction Control	9 (100%)
Constructive Evaluation	9 (100%)

Commitment

In keeping with the findings of earlier studies of elite athletes (Barbour & Orlick, 1994; Anderson & Orlick, 1995; Imai & Orlick, 1995), subjects in the current study were highly committed. All of the subjects indicated that it was very important to them to become a world champion or world class athlete, and that they were committed to excel or to be the best that they could be.

It would be probably the most important thing in my life; I was training

constantly, to try to achieve the goals that I have set for myself. I have to sacrifice a lot and in order to put everything in perspective and to achieve my goals through hard training and commitment. (A:2)

It took me close to 15 years to become a world class athlete and that is quite long. The process is very difficult to explain but I needed to train hard and I needed to invest a lot of time. I don't know how many hours and hours, minutes and minutes and seconds that I have put into training but it took me more than 15 to 17 years to become a champion. It was very important because I set my goal that I wanted to become my best, the best in the world and that was my direction that I was going. It was everything for me. In terms of time, in terms of family and other things, I let those down to face my goal. (B:2)

(Becoming a champion) is everything, I mean I would do anything, I would train how ever many hours it took, 7 days a week for 4 years, 5 years, for whatever goal I have set for myself. I was really basically ready to sacrifice anything to become a world class athlete. (C:2)

Winning and becoming a world champion athlete is very important to me, it is so important, quit everything and just do it fully. To me succeeding in it is not just for myself. Of course you put time into it and train hard. You want to achieve something, you want to excel because this is what you like or you love. It's mainly because I really love taekwondo and also to prove that I'm really good. (D:5)

I guess it was very important because I dedicated my life to it and made many sacrifices. Because I have done all this and dedicated my whole life hopefu!!y I would be a world champion and all the hard work would pay off. (E:2)

According to Orlick (1995), commitment means not only dedication to a discipline in terms of time and energy, but it also means knowing when to take time away from the sport.

"For consistency and longevity of high level performance you must commit not only to high quality training and maximum performance but also to adequate recovery. Allowing enough time for physical and mental regeneration is a critical

part of consistent high level performance. You must learn to "train smart" or "work smart" and listen to your own body. You must respect your basic needs for relaxation, rest, regeneration, sleep, adequate nutrition and joyful moments away from your work or performance domain" (Orlick, 1995; p.12).

I guess doing other sports aside from the sport that you are excelling in gives you just a sport to relax. I did because I enjoy it, and I didn't have any pressure. I know in the long run, it's also of benefit to me. If you always stay and do the same thing, the same sport, you are not going to enjoy it as much. You have to change the routine a bit so that when you do practice, you are serious about it. (F:20)

Orlick (1992) explained that, "Commitment is enhanced when goals are viewed as highly worthy and within one's grasp" (p.111). Burton (1993) was also convinced of the importance of goal-setting. He demonstrated that establishing goals helped athletes increase their levels of self-confidence and commitment, and had positive effects on their control of attention and anxiety. Ericsson, Krampe and Tesch-Romer (1993) also demonstrated the essence of developing high levels of commitment to overcome effort and motivational constraints associated with daily deliberate practice. Commitment is simply indispensable in the pursuit of expert performance as achieving such a goal generally requires a minimum of 10 years or 10,000 hours of intense, deliberate practice.

To become a champion is the ultimate goal for me. My short term goal is to keep fighting and get more experience and train harder now. My long term goal is the 2000 Olympics....when I go training, I make sure it is quality training because I don't want to lose my time. (G:2)

I set both short term and long term goals. My short term goal is to be refining some of the things that I'm doing, my technical skills, my physical

endurance. My long term goal is to become very good and use my mind to control my destiny and show me where am I going and how to get there. One of my long term goals is to be very effective in using my mind to assist me, to train my steps, to get where I want to go, I know the mind can do anything that you want to do, like in the competition, you want to win, part of it is not because of the technical. It is just believing in yourself. I'm working little by little at this, shaping bit by bit until I get to feel comfortable. (H:4)

Taekwondo is my main focus because I put a lot of time into it...in training, I set a goal, I look at what is lacking previously and try to improve on that. I look at short term goals, everyday, every session. I train very hard and it is my goal in the gym. I have to be there, sometimes I feel that I have to force myself, so I count on a short term goal everyday, one day at a time, day by day, I go. (I:4)

In summary, it seemed clear that taekwondo athletes were highly committed to their pursuits. Those interviewed had made taekwondo the focal point of their lives to the exclusions of almost everything else. In fact, only one of the nine athletes interviewed mentioned the importance of balance in one's life and tried to achieve it.

Belief

Orlick (1995) reported that "The highest levels of personal excellence are guided by belief in your potential, belief in your goal, and belief in your capacity to reach that goal" (p.13). The taekwondo athletes interviewed projected strong personal belief in their potential and abilities as elite athletes. Belief or self-confidence element reported to be extremely important in the achievement of exceptional performance (Gauron, 1984; Harris & Harris, 1984; Nideffer, 1992;

Porter & Foster, 1986).

My goal really is to achieve my best, do my best and my best means winning the gold medal or winning and being the top player. Sometimes my best is not necessary the gold medal itself but accomplishing what I have set out to or doing the best that I can do in my sport. There is something inside me saying each time, go for my accomplishment, you can stretch that extra limit, take that extra step, that extra mile, so I thought I can do more and better, I can compete at a better level, for example, the world or international level. I felt I could win more than once, more than twice. I wanted to do it more than once, I have confidence, I have accomplishments, I have achieved all these goals. (H:1)

Some of the athletes interviewed stated that they always had a strong belief in their abilities.

What I achieved is winning a few international games and now the world championship. I have always kind of known that I was going to win something. I know I just have to put my mind to it. Even the world championship, my master (coach) told me I have a chance. I was kind of knowing that I'm going to win the game, I always had the belief in myself that I'm going to do something. I believe in myself. (D:3)

Ever since the day I started taekwondo when I was 3 years old and it was always in my mind. I knew that one day I was going to be a world champion, not second or third but a gold medalist. (E:2)

Other athletes grew to believe in their abilities or had a feeling that because of their preparation, a particular year would be a good one.

I think one of my greater achievements is that I overcame the idea that I am not at the world level. I always had doubts at that time, going to the international events thinking that I should not be here because the caliber is so high, but in New York I think I broke the barrier, and it gives me confidence because I felt that I should be there and that I am just as good as they are and I won the silver medal in World Championship in New York. (A:1)

I didn't have any doubt achieving my goal because I was focused. I was

training and I knew I was prepared. I knew I was prepared and I was doing everything that would possibly help me to achieve that goal....basically my hard training made me believe in myself, and my friends, my teammates, encouraged me. (C:3)

I thought of the training that led me through that day (best performance), I felt how hard I had worked, I thought, this is the best I have ever felt, it is going to be this year, I never felt like this, I could not see myself losing to anyone. I knew I am going to beat everybody. (I:16a)

Assisting with self belief is external support. "Most people need at least one person who believes in them, loves them, makes them feel competent and supports their goals and dreams" (Orlick, 1995, p.13).

First of all my family is the most crucial thing because they have to suffer for me to compete nationally and internationally and they were always supporting me whenever I went. They were my strength when I was fighting, when I was competing at the national and international level. I had a belief and it was a very strong belief that I will win and I am going to do it and that was kind of motivating me to continue to succeed in my career as I went along. Without them I couldn't have come this far and I wouldn't be talking to you right now. They were always behind me and they were always pushing me 100 percent and because of that I have got up and ran or whatever in the morning or did extra training because I knew everybody was also suffering for what I was going through. (B:5)

My family does great deal, they support me, they come to my competitions, they drove me to a lot of practices, through snow, through rain, and they help a lot. In my military college, they will announce (my competitions) around the college, that makes me feel good. I mean it's always nice to get congratulated by your parents, congratulated by the other people, they believe in you, so I keep going. (F:5)

All the people around me, a lot of people, always told me that I have the talent- just train harder, I'm going to make it. There were so many times like this and I was always thinking about them. My brother and my master (coach) always support me, they make me have confidence that I have the potential. (G:5)

Athletes interviewed in this study either had or developed strong beliefs in themselves and their abilities. Contributing to their feelings of confidence was strong support by family members and coaches.

Full Focus

Orlick (1995) explained that,

"To excel at anything, you must develop the ability to focus in the present and maintain focus in the 'here and now' for the duration of the action-oriented part of the task..... One must learn to totally connect with their performance, and trust their mind/body to perform as it has been trained to perform. One must free oneself from unnecessary internal or external interference and to step into the zone for high level performance" (p. 15).

Athletes discussed the way they viewed the match which affected their focus as well as specific things they focused on which helped them perform.

All of the subjects were asked about the differences between best ever performances and poor performances in relation to their mental state or focus within the game. For most of the taekwondo athletes their best mental state during a peak performance was to remain highly focused. The athletes talked about the need for full focus as a means to survive the match.

When it comes to the competition ring, I'm usually nine out of ten. I'm focused because I know that it's a full contact sport. It's kind of like survival between him and me. I don't really think of anything else. It's like you are thrown in a den with lions and you have to survive, that's the way I look at it. (E:9)

During the competition it is you do or die, you know it's either you win or you lose. There is no time to think about something else so I am fully focused,

100 percent focused. (B:9)

A number of athletes discussed the things they focus on to help maintain their concentration for the duration of a match. Some of the things focused upon included: focusing on the immediate situation, on the opponent and on only the essential information needed to compete (the watch and the opponent).

I was saying to myself just concentrate 100% each minute. I tried to stay focused when I was fighting, don't let him out of sight, each second is important. When I am doing good, it was over whelming, it was like partying, it was really a good feeling, I don't know how to express it. (G:15)

In the competition that I did well, I was just thinking about how I perform each match. I wasn't thinking about the result, I wasn't thinking about the outcome, I wasn't thinking of being a world champion, I was just thinking about me having to compete and be the best I could. (A:12)

My goal is staying focused and being the aggressor, not backing down if she starts kicking back, obviously my opponent is going to have to kick back, but you are not afraid of it. If she kicks me off, I just kick her back for me that's the important thing. I stay focused on staying and thinking aggressive, being strong, using my condition and my advantage, trying to stay superior. (F:15)

(Best ever performance) I was very focused during the event that day I did not even look at everybody else. I just looked at it fight by fight, the one person I was competing against. Whoever I met in the final, I did not even care, I just focused in every fight. Every person one by one and I let nothing bother me. Nothing influenced me at all, it did not matter for me that day who was against me. (I:16a)

During the match that seems to be one of my strongest points, I'm usually very focused in my matches. It's almost like I can't hear anything, the only thing I can hear is my coach. I can hear my coach and I can hear my opponent but no matter how much noise the crowd is making, I can't hear the crowd. So there is a lot of concentration, it is almost like a religious thing, you know there is a lot of concentration, I only think about what I want to do, what I'm thinking my

opponent is doing and my coach. (C:9)

In the ring, I have to keep focus more. No one could explore my weaknesses. I use my strength to boost my strength. I use my energy to build more energy. (H: 15e)

One athlete put focusing into a broader perspective. An ability to focus aids in controlling stress. Belief in oneself aids in focus.

Normally if I go in there (training gym) I will focus just on that session and am not thinking anything else. I kind of lock myself in for it. I am just there to train and concentrate more and relax more. Now I'm so much better, sometimes I can actually see things more clearly. I guess it is experience and I can focus so I can't get nervous. When you believe in yourself, you can focus better. You can do this and you are not scared. (D:9)

The previous quotes support Orlick's (1995) contention that an ability to focus is linked with control of anxiety, relaxation, learning, mental readiness, and performance excellence. It is interesting to note that while an intense focus was considered important for high level performance, athletes were unique in terms of the content of their focus.

Positive Images

The fourth element of excellence is positive images (Orlick, 1995). Positive images were used by athletes to mentally prepare for training and competition. Imagery was also mentioned by three athletes as part of their best ever performances.

Orlick (1995) stated that athletes "used positive images to feel the flawless

execution of performance skills". This use of imagery was supported by studies on professional golfers (McCaffrey & Orlick, 1989), Olympic athletes who used imagery to perfect skills in training sessions (Orlick & Partington, 1988) as well as the taekwondo athletes in this study. This is very logical since imagery is usually an integral part of mental practice (Suinn, 1983). It has been demonstrated in the literature that these two skills have often been studied together, and that in some cases, the two terms have been used interchangeably (Murphy & Jowdy, 1993).

Before I go to practice I want to think that I am really going for fighting. I picture myself fighting how I want to fight, and when I practice I try to do it. (G:6)

I try to visualize things before I go to bed or in training. I think in my mind of a fighter; I create the fighter in my mind. Maybe that's why it helps too because you are winning in your mind first before your body can win. So in my mind, when I visualize the fighting even if I lose points or the game in the fight, I always try to overcome it; I always visualize that I win the fight and my hand raises. So then subconsciously I know that I can win. (E:8)

I close my eyes and I visualize how I want to look and I try to get as close as possible to that. What I do is I close my eyes and I picture my hero or anything that I saw in the competition that really impressed me, the speed, the power and I try to copy that in my mind, and then I try to achieve it during practice. I try to fight like a guy, like my best friend because a girl fighting is a little bit different, so I want to try to get away from that, to be more aggressive and to be more forceful. (F:4b)

Orlick and Partington (1988) found imagery to be an important element of Olympic athletes' precompetition plans. The athletes interviewed in this study

also spoke of using imagery to help them prepare for competition.

I make sure my body warms up very well, and I make sure I am very well stretched out. I keep thinking in my head just before the competition, the word "control", "control". I must be in control, I must be in control. When I do that, when I say those words to myself, and when I feel it, I almost mentally see it. Emotionally I become stronger, all of a sudden I would feel that I have that inner strength, this energy inside. That's kind of a good and positive thing for me. (A:14)

To get myself mentally ready, I try to imagine that I am in the game and go through all the possibilities that I have to overcome. By doing that you are educating and telling your body to do the motion, so it is a good idea to go through that imagery training. (B:13, 26)

Before the competition, I make sure that I was prepared for the tournament, I don't listen to any music or anything. I visualize myself doing what I am going to do. I don't do anything different or any unusual thing. I like to lie down and think about it. (D:7)

Imagery was also mentioned in conjunction with best ever performances.

According to certain researchers, elite athletes are more likely than non-elite athletes to adopt an internal imagery perspective. Non-elite athletes have been reported to more frequently use external imagery (Mohoney et al., 1987; Rotella, Gansneder, Ojala & Billing, 1980). Due to inconsistent research findings, it is still not clear if one perspective is more effective than the other.

For my best ever performance, I was shorter than my opponent. I tried to get the advantage over him and I beat him so clean, like everything I played in my mind was there and I was so proud of it. When I went in to the ring, mentally I felt so prepared. Every time when I threw a kick, I scored a point and my timing was perfect. All the things that I worked on in practice happened in the game. Everything was according to what I've planned before I went to the ring. It was like a perfect match. (C:16)

In my best performance, I felt I was going to win before I even fought. Right away after my training, I felt I was going to win and it did not matter who is in my division. I think mentally I felt so confident. Training went well and nothing seemed to stand in my way or bother me. I relaxed, ate and dieted well. The morning when you wake up, you just have a good feeling. I knew the way I was fighting I felt really good, my body was following. All my techniques I mentally rehearsed in my head. All my visualization and everything came out in the ring perfectly. I was surprised with what happened. I was happy, things that I have had problems with, I overcame them. I didn't really see many things that I did wrong. (I:16a)

To become a champion is very important. It's like a dream, something I envision: what I want to feel like, where I want to be, people I want to see in my dream. In my mind, in my eyes, it is like a dream. I won the bronze medal at the world CISM (military) Games in Korea and there was my dream coming out, I could feel it. The Canadian flag was paraded by me and it was like a dream. I felt every sensation that came to me; my dream came true. In 1991 I came close to winning the gold. It was the same thing, the same feeling again. I felt very rich. I don't know how is it to be a millionaire but that's how I felt. (H:2)

As with elite athletes in other studies (Harris & Harris, 1984; Hemery, 1986; Mahoney & Avener, 1977; Mahoney, Gabriel & Perkins, 1987; McCaffrey & Orlick, 1989; Orlick & Partington, 1988), the taekwondo athletes considered imagery as an integral part of their training and competition preparation.

Mental Readiness

Mental readiness is attaining a state of mind which helps an athlete perform well on a more consistent basis. Orlick (1995) stated that the key aspects of mental readiness are the ability to prepare oneself to perform to potential in the performance zone and relax oneself and one's focus when away from the performance zone. Loehr (1983), Weinberg (1988) and Cohn (1991) each

reported that the ideal performance state required one to be physically and mentally relaxed.

Successful athletes have unique habits that they perform before and during the contest which helps them achieve the ideal mental state for competition. For example, some athletes may prefer to be alone immediately before the contest, some may prefer to have a coach present during the warm-up period; some may use mental imagery to build confidence and to rehearse their performance strategies and so on (Anshel, 1994). The athletes shared many details about their competition day and training day routines.

The day before the competition I relax a lot. I like to have nice stretch and eat well. I like to go for a nice walk, think about that training is over, think about what I went through, where I am. I do not like to think about the actual tournament because I do not want to get too excited. I want to get a good massage and be able to sleep early, just think of all the work that I have done and think what is coming up. Think of the goal that I have but not to think the actual outcome so I would not get too excited, mainly try to relax the night before. (I:8)

On the day of the competition, I get up ahead of time for the weigh in. If the weigh in is at six in the morning, then I wake up at five thirty, and then I take a shower, have a clean shave, just to look and feel good, like a champion. I mean business. I don't want to be friendly before the match or anything like that just because all you have worked for you can lose in that split second. I am always the first in line for the weigh in just in case. I never miss the weight but if by chance I did miss the weight, I have time to run and sweat it out. After that I have my breakfast. I have my plan. I always bring my own food with me to the tournament. When we get into the tournament arena, we (the team) do a light warm up. It's not too hard, everyone really fires up, everyone just pumps up, helps and motivates each other. We give each other cheer. When you are a good team, it kind of intimidates other teams. I wear a lot of clothing just to keep warm. I like to be sure when I am fighting, I like to be well prepared. The thing

I hate most is looking around. I don't want any more stress whatsoever. I don't like to be looking for my equipment, my shin pads, I make sure I have all this together. I'm just ready (E:14).

I kind of visualize myself doing what I am going to do. I don't do any different or unusual. I like to lie down and relax. I don't like talking to my opponent, before a big fight. I'm relaxed, I think of what I'm going to do, the techniques that I'm good at. This is what I did before, this is my strategy, this is how I am going to fight. You kind of feel that you're here and all the training has been done and you are going out there to fight. When I am relaxed, I feel good. When I feel good, I am fighting good with all these strategies. Then I don't even get tired. (D:8)

I eat a good meal, a lot of carbohydrates. When I'm in the competition arena, I like watching people fighting, picturing myself fighting there and picturing myself doing well in that particular match that I am going to fight. Then I go outside and relax, go to take fresh air, then go in and watch and start picturing again. (G:14)

There is a set schedule prior to the competition. On the day of the competition, I have a good meal, rest, after that have a good sweat, not a good practice but just a short warm up before entering the ring. If I know my opponent, I try to set a target for myself usually in the first round, make sure I score one or two points, be ahead in points. The second round is for me to relax, let the opponent come to me and make the mistakes. You take advantage of that, I actually think about which techniques I'm going to do to score points on my opponent. I also focus on certain things that I know my opponent is capable of scoring points on because of certain circumstances. If I don't know my opponent, then that's different, but in terms of points it is still going to be the same thing, I'm still going to be ahead one or two points ahead of my opponent in the first round. (C:14)

I would have enough rest the day before the competition, I think that is the key, and relaxation with some nervousness. I think the key to my mental preparation was to continue mental training wherever I am to think about the strategy that I am going to use at the competition. I actually think about the referees. I actually think about the floor that I am going to be in. I actually think about the timing, and I catch the timing, the time or period of the competition or the match so I actually plan out the whole strategy that I need for each fight that I

am going to create. If in national and international events I would expect someone to come out that I know, then is easy for me to calculate what that person's techniques are. If I don't know that person, I have to have very good communication with the coach, then find out his weaknesses and imagine myself to be in the competition. (B: 8)

I feel that I must be strong, and I must gain my opponent's respect right from the start. I have to show the opponent that I am strong and I am prepared. I think about that. Then usually I'll show it right away by delivering a strong and powerful blow to the kidney side or whatever but usually my first aggressive attack will be in the first round of the match. If I do any skill or throw or any kicking technique and it will be a very powerful blow and I would have to make it connect and get the message across that I'm strong and I'm ready. (A:14)

According to Orlick (1995) personal excellence requires that you become proficient at getting the most out of your daily learning and living experiences. This begins with a commitment to make the most of each learning and performance opportunity. You must become proficient at mentally preparing yourself to face real and anticipated demands, and be ready to get the best out of yourself during demanding, high pressure situations. The athletes in this study used mental preparation to get the most out of their training sessions and used their training sessions to prepare for competition.

I think my actual preparation starts at home for training. My mind is already in taekwondo and I know that what I have to do in this practice is to get the best out of this time. I know that before going. I will set up a strategy that I will work on today and what I want to practice. If I was lacking some kind of training, I think about it before I go to the practice and get ready. So I am actually preparing mentally before practice and that is important. Rest is also important, sleeping in the car or sleeping in the bus kind of helps me. If I get to practice right away and I don't know where I am going, if I didn't have a plan or if I didn't plan anything, then I didn't know where I was going. I was just following the instructions which

means I am being a machine and I didn't want that. I want to have my own character, I want to have my own strategy, so most of the time before I went to training, there was a strategy or plan. There was kind of motivation that I had, I have to have before I get into training, otherwise I wouldn't train. Of course, I do mental practice that is very intense because the mental practice will prepare me to adapt to any kind of situation that will happen in the practice. That was a very crucial thing in terms of my success and winning a medal in the international level. That training played a crucial role. (B: 6)

I have to talk to myself before the practice. It usually takes about half an hour. During the day, I always think about practice, this is what I want to do, you have to do this. I motivate myself so that even though sometimes I'm tired, when I get to the practice I actually want to do it. If I don't do that then I don't get the most out of it. When I do the self talk, I always have a fight in my mind, like ok, this is the way to keep it doing it better. Then I imagine the fight that I will be doing later and how I want to attack my opponent and I keep seeing it in my mind, until I go to practice. Then I try to work. (F:6)

Before training, I do what I call a mental warm up, mental preparation. I vision things happening before they happen. I think about how yesterday was, our practice session, what's my feeling, what my accomplishment was, and I say tomorrow I am going to make it faster, I am going to make it more effective. Proper mental training I want to achieve.....my training has do with mentally preparing before and after the training. Before training I will listen to a very relaxing tape, for example classical music. During training if alone, I see it like survival. I just do it. There are times I just train in silence but I am mentally training along with my physical and technical (H:6,7).

Each of the athletes interviewed had very individual preparations for training and competition in terms of what they chose to do and think about. These routines aided the athlete in getting the most of themselves and their experiences by putting them into an ideal mind set for training or competition.

Distraction Control

Orlick (1995) explained that, "distraction control refers to your ability to maintain or regain a positive, effective focus when faced with potential distractions, negative input or setbacks. These distractions may be external,

arising from your environment, or internal, arising from your own thinking or your own expectations" (p. 16). Effective distraction control is a factor related to successful performances (Orlick & Partington, 1988). The taekwondo athletes who participated in this investigation proved to be a rich source of information pertaining to potential distractors, and strategies used to control distractors.

If I lost in the first round, I've got to get it back somehow. I have to find an opening, to find a way to score those points. I would say to myself, "I will find those openings", "I will score". Usually I'm pretty confident in that area. I would say to myself "don't worry, don't rush, I will find the way". That's usually how I feel, that's the mental state I would be at. (A:15f)

It was a whole new different world for me because it's tough talking to yourself and keeping yourself in control. I knew that if I could win over myself, that gold medal win was with me. I knew if I tried my best and I lost, I would be happy with it but if I didn't do my best but I lost then I would be very frustrated and very stressed out. Because I am a Christian, I always read the Bible and the Bible always inspires me. I pray and I took things in a broader way.

If something didn't go well, I would try something else to make it go well because there is no sense of standing there or kicking the same technique over and over because an opponent would memorize that, he would counter-react that, so I would create something different for him to react to so that he would be disturbed by the attack that I was creating. So I would rethink and have a different plan, a different strategy to attack the opponent to get the points. (B:14,15)

I have pain in my ribs, and this is the very important fight. I knew I was against the top guy in the competition in that weight division. I knew he was the top guy; he was the one to beat. I wanted to beat him so badly, I said, "I was not going to feel the pain". I would just go out there and fight. (C:11)

If I am tired in training, I will talk myself out of being tired. I tell myself I have to go train, and if I've eaten, I'm more prepared. "Don't think of anything but taekwondo, and just relax and have fun". To achieve my goal I know I have to compete honestly, I know I have to train, I can't stop, I have to train or else I will never improve. If you don't make yourself go, you are not going to succeed. (D:7)

Sometimes when you are down, when you have an injury or you just don't feel like doing it, I always seem to pray to God for something peaceful.

Sometimes you need relaxation. (E:7)

(When not performing well) Perhaps I just fought for the sake of fighting instead of worrying about what people might think. Think more about who you are representing and just go in there and fight. (F:10)

I just try to clear my mind because sometimes people come and talk to me. I try not to talk to them, try to stay alone, try to focus on what I am going to do, that helps me a lot. (G:15b)

In training sometimes, if there are negative people around me, I have problem with that but not for very long. I usually ask myself why I'm here, why I'm doing this. My goal is I want to get the gold. In competition I would say, "Don't give up at this time, you are the champion,"..... It was like somebody was talking to me. (H:9,11)

I just try to do whatever I can do and just block other things which are not important. Just go and do your best. (I:11)

Distraction theories have been used in the past to try and explain the relationship between attention control / focusing and performance. These theories have postulated that individuals lose their focus because certain factors attract their attention to task-irrelevant cues. Athletes constantly face distractions in sport and life and it is believed that to obtain high levels of performance, they have to be able to not only focus their attention on task-relevant information, but to refocus when distractions shift their attention to non-relevant stimuli (Boutcher, 1993). It is believed that to obtain consistent performance in training and in competitions, athletes must develop the skill of distraction control by practicing it regularly (Curtis, 1987; Orlick, 1986, 1990).

A number of strategies were used by athletes to help them deal with distractors. Athletes mentioned using encouraging self talk, staying away from others, reminding themselves of their goals, praying and using external aids such

as reading the Bible when faced with setbacks and distractions.

Constructive Evaluation

To achieve the highest performance level, athletes must evaluate and continually work to upgrade the preparation and focus for best performances (McCaffrey & Orlick, 1989; Orlick & Partington, 1986, 1988). Important lessons are gained by evaluating the overall performance, as well as the role the mental state played in the performance (e.g., mental readiness, trust, distraction control, and sustained focus). Through experience, top performers have developed constructive evaluation procedures that are highly individualized and personally effective. This guides their continued pursuit of excellence (Orlick, 1995). According to Orlick (1986), it is healthy and important to acknowledge not only one's weakness, but also one's strengths. This process was reflected in the personal evaluations of most of the participants. For some athletes evaluation occurred not just at the end of a competition, but also during.

I always talk about it after the competition. People will get mad at me because my idea is when I lose, I talk about it and then I get so mad, I keep looking at why I lost. Why did I do this, why didn't I prepare myself, and when you talk these to people, they don't listen to me all the time. They think that it's over but it's never over. When you lose, it's a good idea to look back and talk about why you lost. If you look back after, you see why you lost. If you are just going to say it's over and I don't want to think about it, how are you going to improve? (D:16b)

When I was still young, I was fighting with more experienced people. I lacked self-confidence within my own ability, although I had the techniques. It's the mental strength. It was tough for me to overcome. Now I've got more experience so I'm more stronger mentally...It was a learning experience for me. I really kept up the training, I was changing, looking at what I did wrong, looking at the tapes, changing a little thing, a little thing that would mean a lot, a little more of this and a little more of that. You have to do this if you don't want to

see yourself lose. You need that. It is the only way to get better. If I start changing this then I can improve on this and this is a good way to learn a lot by seeing your faults and trying to fix them up. (E: 3,16a)

I always try to analyze why I lost, that is the most important thing to me. I am always able to overcome it by analyzing why I lost, so I always keep trying. When I lost I never gave up, I came back and I had a good sense of analyzing why I lost and realised that person who beat me is nothing special or better than me. But sometimes I make mistakes, either mental or physical or whatever but if you can figure out and analyze it, you can overcome that. (I:3)

If I am losing in the first round, I still have the second or third round. We go back and fight the opponent, slow down and figure out my opponent instead of going crazy, and panicking. In the second round if I'm losing it, honestly this is not working, if there is a big points spread then there is only one thing that I can think about which is to go for a knock out. (C:15f)

The athletes also discussed important lessons they learned from thinking about their performances and as a result of experience.

I think experience helps me as an international athlete. I have exposed myself to those events. It make me a better athlete, a better competitor and a better person. (A: 3)

Losing is part of learning taekwondo too. You have to lose properly. Some people just forget about everything but losing is part of learning too. (B: 4b)

I usually don't think about it because if I think about it too much then I just get too tense. That happened in 1992 national and Olympic team trial. All I did was 24 hours of thinking, how I am going to fight. I just sat there with the walkman and just thought and thought and kept thinking. I never let my mind loose. What happened was I got to the ring and I lost. I was too nervous and I don't want to be that way anymore. The next year after that, I didn't let myself think about it until I was there. I don't know whether it is good or not but it seems to work for me. Thinking about it too much is not going to help me. Training and preparation should be done before, it just a matter of being intelligent and smart. (F:8)

(Learned from worst performance) I'll make my weight a lot (made it to the weight category) before the competition day. I go in there (hotel) and have enough sleep. Try not to think too much about the competition. The next morning, I will feel good. I think all is mental. (G: 10)

After my worst performance, I just felt that I should be more focused, don't let your teammate affect your mood. I shouldn't have got angry easily. That destroyed everything totally and from that I didn't win the gold. (H:16b)

The majority of athletes in this study recognized the importance of evaluation. This process of competition evaluation revealed to athletes those areas where refinement was necessary.

In summary, the results of the interview study lent general support to Orlick's Model of Excellence (1995) in that the elite taekwondo athletes interviewed for this study discussed all of the seven main elements. Thus, the relevance of the components of the model for excellence in taekwondo was confirmed.

Orlick (1995) has broken down each element into subcomponents in an attempt to fully describe each element. Each of the subcomponents (see figure 1) was referred to by some athletes. The number of text quotes associated with each subcomponent is presented in Appendix H. Belief and commitment had the highest number of quotes, 53 and 52 respectively. The number of quotes associated with the remaining elements are as follows: Mental Readiness (41), Imagery (40), Constructive Evaluation (31), Full Focus (23), and Distraction Control (20).

Further research should examine the subcomponents of each element in order to determine the relative weight of each subcomponent and to determine whether the component is adequately described or represented by the set of subcomponents determined by Orlick (1995).

The second purpose of this study was to look for elements not mentioned in

the Model of Excellence (Orlick, 1995). The athletes discussed no other element important to their success that could not be encompassed in the model.

Questionnaire Study

Twenty-nine athletes, those involved in the interview study as well as competitors at the 1995 Canadian National Championship participated in the questionnaire study. The results of the questionnaire study are presented in the following section.

Opinions on the importance of mental skills. The taekwondo athletes were asked to rate the importance of nine key mental skills for taekwondo (see Table 5). Means and standard deviations were presented in rank order. All the mental skills assessed were close to each other in terms of mean scores which ranged from 8.14 (the lowest) to 9.70 (the highest). This finding showed that all the mental skills were rated as being important.

Table 6
Taekwondo Athletes' Opinion of the Importance of Mental Skills

Mental Components Rank Ordered	Taekwondo Athletes	
	M	SD
Mental Readiness	9.70	0.71
Full Focus	9.66	0.55
Commitment	9.59	0.78
Distraction Control	9.48	0.79
Creativity and Spontaneity	9.28	0.84
Constructive Evaluation	9.24	0.87
Fun and Enjoyment	9.24	1.09
Positive Imagery	9.14	0.90
Belief	8.14	0.80

Note: Based on ratings on a 10 point scale:
 1=Not Important, 10=Extremely Important

The majority of the interview subjects stated that taekwondo competition is dangerous and if the competitor is not mentally ready and focused in the ring, he or she might get knocked out at any time. This may explain why mental readiness and full focus were rated most highly.

Self-ratings of application of mental skills. The taekwondo athletes completed 11 questions which asked them to assess their own application of mental skills or perspectives (see Table 7).

Table 7
Taekwondo Athletes' Personal Assessments of their own Application of Mental Skills or Perspectives

Mental skills Rank Ordered	Taekwondo Athletes	
	M	SD
Fun and Enjoyment (Commitment)	9.03	1.02
Belief in Potential (Belief)	8.69	0.85
Full Focus during Practice (Full Focus)	8.66	1.01
Full Focus for Entire Fight (Full Focus)	8.62	0.98
Mental Readiness for Practice (Mental Readiness)	8.59	1.02
Distraction Control (Distraction Control)	8.55	0.89
Mental Readiness for Games (Mental Readiness)	8.55	0.91
Commitment to Taekwondo (Commitment)	8.52	0.74
Creativity and Spontaneity (Mental Readiness)	8.17	1.04
Quality of Mental Imagery (Positive Images)	8.17	1.07
Constructive Evaluation (Constructive Evaluation)	8.10	1.33

Note: Based on ratings on a 10 point scale:
 1=Poor, 10=Excellent

As with the ratings of the components considered important, ratings of personal assessment of application of components fell within a small range. Fun and enjoyment which is a subcomponent of commitment in the 1995 version of the model (Orlick, 1995) was rated the highest with the average score of 9.03. The lowest rated component was constructive evaluation at 8.10. The small range of ratings of was likely due to the high quality of participants selected for the study.

A comparison of Table 6 and 7 indicated generally that the taekwondo athletes rated the importance of each mental skill higher than their personal ability to implement that mental skill. This would indicate that the taekwondo athletes

realized the importance of these mental skills and perspectives and still had not reached the highest level with their mental skills.

Belief is the mental skill which differed the most in terms of its ranking as being important to taekwondo and its place in how athletes rated their abilities. It may be that athletes rated belief as least important because it was something they were proficient at.

The taekwondo athletes also personally assessed the percentage of practices and games for which they were "fully focused", and the percentage of games for which they did a complete constructive evaluation over an entire season.

Table 8
Taekwondo Athletes Assessments of Percentage of Time Focused In Practice, Fights, and Evaluation

Mental Components Rank Ordered	Taekwondo Athletes	
	M	SD
Percentage of Practice Fully Focused	81.72	9.85
Percentage of Fights Fully Focused over a Season	80.97	8.83
Percentage of Fights with Complete Constructive Evaluation	80.41	9.62

Athletes' ratings of the percentage of practices and fights fully focused and percentage of fights followed by constructive evaluation suggest that there is still an opportunity for improvement in these areas.

The results of the questionnaire study added numerical support to the findings of the interview study that all seven elements were discussed by athletes. Athletes

not only rated the list of mental components as highly important to success, but also rated themselves quite highly in terms of application of these skills.

General Discussion

Athletes, coaches and sport psychologists agree that mental factors are significant contributors to the outcome of physical performance (Diamant, 1991). Athletes participating in this study also emphasized the importance of the mental aspects of performance; the percentage of their performance they considered to be "mental" was 77 percent.

One way of looking at the mental side of performance has been through identifying psychological characteristics or skills of athletes (e.g., Hemery, 1986; Mahoney, Gabriel & Perkins, 1987). Orlick's Model of Excellence (1995) identifies seven elements associated with elite performance. Support for this model in terms of the main elements has been found in a number of disciplines including music (Talbot-Honeck & Orlick, 1995), surgery (McDonald & Orlick, 1994), astronautics (Sprung & Orlick, 1995) and most notably, in sport. The original model was based on data from elite athletes (Orlick & Partington, 1988).

A number of studies have been conducted which have examined the model in sport-specific contexts, for example, with elite hockey players (Barbour & Orlick, 1995) and with football players (Anderson & Orlick, 1995). This study applied Orlick's Model (1995) to a combat sport-taekwondo.

Lucas (1992) stated that,

"taekwondo competition, like Olympic boxing, consists of three rounds lasting three minutes each, with one minute of rest between each round. The tough and

disciplined athletes bow to each other, to the referees, to opposing coaches, and the mayhem begins. The athlete with the largest numbers of effective kicks and punches is the winner" (p.80).

The seven skills which make up the Model of Excellence include : commitment, belief, full focus, positive images, mental readiness, distraction control and constructive evaluation (Orlick, 1992; 1995). Support for Orlick's seven elements of excellence (1995) was found in this study. Athletes mentioned all of seven in their discussions of successful performances. The following section examines some of the elements in terms of their particular relevance to taekwondo.

Orlick (1992, 1995) considers commitment and belief to be the hub of the model and the numbers of text quotes from the interviews support the importance of these 2 components. Commitment and belief had the largest numbers compared to other components (see Appendix H). The data from the questionnaire study did not totally support these two as most important as rankings of importance of mental skills placed commitment third and belief last. Rankings in terms of ability placed belief second and commitment in the bottom half.

This discrepancy between the interview study and the questionnaire study may be interpreted in that in the questionnaire study, the level of athletes ranged from provincial to international. Perhaps commitment and belief are only considered important at the very top level of performance. In Durand-Bush's finding (1995) it was three questions in the commitment section of the OMSAT that best

discriminated between elite and competitive athletes. Another interpretation of the discrepancy may be that the importance given to an item may be based on how good an athlete believes they are at that skill. For example, they may feel that their level of commitment is low and therefore they ranked it as an important skill to work on. If they have a strong belief in themselves, they may rank it as less important as they feel they do not need to work on it.

These findings must be interpreted with caution. Although there are many quotes associated with commitment and belief, it does not mean these skills are necessarily more important than the others. They may be easier to discuss or more questions in the interview guide may have evoked discussion of these skills. As well, the differences between the means are small. Mean ranged between 8.14 and 9.70 on a Likert Scale of 10.

An important subcomponent of commitment which is mentioned but not elaborated on in the model is goals and goal-setting. The majority of the athletes had a specific long term goal-to compete in the year 2000 Olympics. Short term goals were also evident and mainly centered on winning or competing at certain competitions. Technical goals were rarely mentioned, possibly because the athletes were already highly skilled or because it was not directly addressed in the questionnaire. In Durand-Bush (1995), all three components (foundation skills, affective skills and cognitive skills) were found to significantly discriminate between elite and competitive athletes, with foundation skills (which included the Commitment, Belief / Self-Confident and Goal-Setting scales) being the best

discriminating component. This provides more evidence that these three skills are the mental cornerstones of excellence in sport. Goals and goal setting should be made more explicit in Orlick's model.

At the elite level of competition, it has been suggested that athletes' self-confidence is oriented more toward their own performance than toward the outcome of a contest (Gill & Dziewaltowski 1988; Vealey 1986). For example "Media reports typically indicate that Olympic competitors may want to win the gold medal, but the athletes also define a successful outcome as a function of reaching or surpassing their own personal best. They like to enter the contest knowing that they will" (Anshel, 1997, p.24). Loehr (1983) and Cohn (1991) both used the term self-confident to describe athletes who had achieved consistent peak performances. Data from the interviews showed that athletes in this study also had strong belief in themselves. If they did not have it in the earlier days of competition, they gained it. They ranked its importance as lowest but ranked their ability to believe in their potential as high.

The importance of mental readiness was indicated in this study in a number of ways. It was ranked third highest in the numbers of text quotes and it was rated as the most important of skills in the questionnaire study. However, athletes rated their ability to be mentally ready for practice and mentally ready for performance as lower on the scale (mentally ready for practice as fourth and for performance as 6th).

Malone's (1985) review of literature on risk taking in sport concluded that the

athlete's perception of danger creates excitement and a desire to master the environment. The desire to win or knock out the opponent and master the entire fight creates the excitement to survive. One of the elements the athletes considered crucial to their survival was mental readiness. On the whole, athletes did not discuss having detailed mental preparation plans. The aim of their precompetition plans was to create the proper feeling for competition, a feeling of power and aggression.

A feeling of power was one aspect of the ideal mental state athletes wanted to achieve. Athletes also wanted to be mentally relaxed. The ideal performance stated being described as one of physical readiness and mental relaxation is also supported by the literature (Anshel, 1994; Loehr, 1983; Weinberg, 1988; Cohn, 1991).

The findings on the remaining four elements of the model are less easily discussed. Discrepancies occur between the number of quotes associated with each and the findings from the questionnaire study.

Orlick, in the latest revision of this model (1995) states that focus is one of the most critical mental skills for success. Mental qualities previously reported to be necessary for success in taekwondo included mental alertness (Christensen, 1989), and attentional focus (Payne, 1981).

An ability to focus was ranked by athletes in the questionnaire study as the second most important skill. It was also ranked as their third best skill in terms of ability. The number of text quotes associated with focusing, however, was

second from the bottom. Athletes had less to discuss in terms of focus skill in comparison to commitment and belief. However, the numbers of quotes may not be related to the importance of a component. Distraction control was another skill that was ranked in importance and ability much higher than numbers of quotes.

Imagery and constructive evaluation were considered to be among the least important in rankings of importance and ability. It may be that in terms of imagery, athletes consider it to be a skill linked with mental readiness; many of the quotes described the use of imagery as component of their precompetition plans. The number of text quotes associated with imagery was the fourth highest. It may also be that imagery is not considered to be a critical mental skill for taekwondo.

The comments from the athletes who participated in this study indicated that studies of this nature can not only help them to better understand mental strategies, but also help the athletes become more aware of the importance of the mental aspects of excellence, to review important mental aspects of their sports, and clarify what needs to be improved. Although helping athletes was not a primary purpose of the study, this was spin-off the present study as it was with the Imai and Orlick (1995).

Athletes gained from participation in this study. They indicated that being asked to speak about what they do helped them realize the importance of mental skills and realize that these are areas they can improve upon. Not only did athletes say that they gained from participation in the study, their discussions of

what they found key to their success from a mental point of view can be used to assist developmental taekwondo athletes. It was mentioned in the beginning that the applied purpose of the study was to derive information of use to up and coming athletes. Athletes were asked what they could do to improve the overall mental readiness of Canadian taekwondo athletes. The following is a list of strategies/skills/information which could be helpful: 1) a commitment to do everything to excel is needed, setting goals both long and short term goals and proper planning will help establish commitment, 2) talk with those who believe in your potential, 3) establish moral support from parents, family and coaches, 4) establish peer support which includes sharing ideas, 5) attend provincial team training and national team training camps with group dynamic activities, 6) be honest with respect to your feelings, 7) look for help everywhere - approach mental training consultants or sport psychologists who can set up a mental training program (individualized or team package) for you and try mental training on audio or video tape (e.g., relaxation music, highlights tape), 8) use a checklist, note taking for daily goals, 9) keep a log book (e.g., write down highlights everyday), 10) learn from mistakes and significant others and 11) constructively evaluate after each tournament with teammates, family and coaches.

The information collected from athletes in this study will be beneficial to both those who participated and those athletes who read the study. Learning also took place for the researcher through conducting this study. A discussion of limitations of the study as well as suggestions for improvement follows. Some of the study

limitations include: 1) the trustworthiness and ability of the taekwondoists to articulate their thoughts and feelings during the interview process is assumed, 2) Subjects may not have enough time to think deeply about their mental strategies as the interview was done on the spot, on the other hand, having them spontaneously answer questions gives them less opportunity to create the "right" answer or the answer the athletes think the researcher wants to hear, 3) Subjects may not want to expose much of their thoughts and feelings as they feel this may jeopardize their power and energy, although the majority of the participants appeared comfortable with discussing their sport and freely answered the questions, and 4) the fact that English is not the first language of the researcher may have had an effect on the interview process in terms of understanding participants' responses and being understood.

With respect to improving the study, the "Taekwondoist Interview Guide" was a useful instrument through which to obtain data relative to the research question, however, it could be modified or added to prior to its being employed in future studies. As stated by Imai and Orlick (1995), it is possible that some of the subjects may not have talked about a component, or sub-component, of the "Wheel of Excellence", not because it was not part of their approach, but because they were not directly asked. Either an extensive list of mental skill components and sub-components could be provided to the subjects, which they could rate and discuss, or a less structured interview guide could be used allowing more freedom in data collection.

Concluding Remarks and Future Directions for Research

The findings of this study led to the following conclusions.

1. Orlick's seven elements of excellence were clearly evident among elite taekwondo athletes: commitment, belief, positive images, mental readiness, full focus, distraction control, and constructive evaluation. This present study thus implies that these seven elements are necessary to develop in order to be successful.

Conclusive findings on the relative importance of each of the mental skills did not result from this study. Tentative findings did suggest that commitment and belief are considered the most important skills followed by mental readiness.

(a) Commitment and belief were considered important based on number of quotes relating to this study and to some extent, through the questionnaire study. Athlete goals were also discussed as an important subcomponent of commitment and should be made more explicit in the model.

(b) Mental readiness also emerged as an important mental skill based on the results of the interview and questionnaire studies. Imagery may be linked to mental readiness as many of the subjects discussed the use of imagery for competition preparation.

(c) Of the remaining four mental skills, imagery, focus, distraction control and constructive evaluation, it was difficult to determine relative importance.

Discrepancies arose from a comparison of the interview and questionnaire studies.

2. Highly successful taekwondo athletes felt that good mental skills were

important contributors to the high level of their performance.

This research not only answered a number of questions but identified several areas that need further investigation. The main areas to research include 1) a more thorough examination of the mental elements involved in an entire competition day (e.g., how energy and focus is manipulated before, during and between fights), 2) the role of teammates in an individual sport, 3) a more thorough examination of effective training strategies (e.g., sparring with partners versus solo work), 4) assessment of efforts to enhance psychological skills training in both developmental and elite taekwondo athletes, 5) conduct longitudinal studies on the development of mental skills, 6) examine sub-conscious as well as conscious mental preparation routines, and 7) to observe and interview athletes regarding their mental preparation and strategies across a wide variety of situations (e.g., losses, easy wins, come-from-behind wins) to better understand the role of psychological skills. Hence, it is important that future studies examine mental preparation skills and strategies in taekwondo athletes where the athletes could be observed under a wide variety of sparring situations.

It is hoped that the information gained will in some small way help not only sport psychologists and sport researchers, but will also help many athletes and coaches, to improve their performance and enrich their personal growth.

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APPENDIX A :TAEKWONDOIST INTERVIEW GUIDE

1. What do you consider to be the major achievement(s) in your life?
2. How long have you wanted to become a world class athlete? How important was becoming a champion to you?
3. Have you ever doubted that you could achieve your goals? If yes, why did you lack that belief? If no, what made you believe in yourself?
4. Do you set specific goals for yourself with respect to your taekwondo?
 - (a) What type (ie. long term , short term)
 - (b) Do you set goals for each practice session? What type?
5. Is there anyone or anything you think was essential to your success? For example without them or it you could not have achieve that?
6. How do you approach practice sessions in the taekwondo training program? Do you have ways of preparing yourself to get the most out of these sessions?
7. Do you think that you trained differently than other athletes in your sport? How did you get yourself to push, or train, when you didn't feel like it?
8. Do you think that your mental preparation differed from other athletes in your sport? How did you spend the day before competition?
9. Do you have any problems concentrating during the match (in training) (or appropriate phrase)?
10. When you were called to "on deck" in your most recent international tournament, were you ready?
If not ready, what was missing? What might have helped? What would you have done, if you could have done something differently?
11. Did anything unforeseen happen, either before or during your competition(s) which may have affected your performance, for better or worse? What were you thinking or saying to yourself at that time? Were you able keep "on track"? How?
12. What was your goal for the most important event (Olympics, World Championship, World Cup etc.)? Did you achieve it? Before the competition(s) began, did you believe that you could achieve your goal?
If no, why do you think you lacked that belief?
If yes, how did you develop the belief that you could do it?
13. What did you do to get yourself mentally ready, if anything? (Probe for details about source of ideas, actual strategies, and mental training practices in terms of when, where, how often, with whom, and with what success.)
14. We are interested in the kinds of things that you generally do and think about on the day of the competition. How do you start preparing for your event that day? Do you usually follow a specific pre-competition plan prior to your events? If so, please outline. Did you follow that plan for your International event(s)?
15. What were you thinking, saying or focused on
 - (a) before entering the competition arena in the first round, second round, and

third round?

- (b) immediately before the start of your event? How were you focused before the first round, second round, and third round?
 - (c) during the event or fight (when performing best, and when going less well?). What were you doing or thinking?
 - (d) one minute before the end of the match in the third round (final round)?
 - (e) when the score board showed you were winning at the first round, second round, or third round? Do you like to look at the score board? If yes, when?
 - (f) when the score board show you were losing at the first round, second round, or third round?
16. (a) What was your best ever performance? What were you thinking or saying to yourself immediately before the event? How were you focused during the event? What were you doing or thinking between periods of action? What were you thinking or saying after the competition?
- (b) Now think about one of your worst performances in international competition for that same event. Which one was it? Again, what were you thinking before the event? How were you focused during? What were you doing or thinking between periods of action? What were you thinking or saying after the competition?
- (c) What were the major differences between these two performances in your preparation, thinking, feeling, or attentional focus?
17. What role, if any, did your coach and/or others, such as Consultants, play in your preparation? In what way, if any, did they help or interfere? How do the team members get along? Do you think your teammates help you in your mental preparation? If yes, how and in what way. If no, did you do something about that?
18. Have you ever worked with a sport consultant/psychologist for more than one session, please answer the following:
- (a) What brought you together with a sport consultant?
 - (b) How did you get started? What did the consultant do first? What did he/she ask you to do? What did you do? (Probe for details about the consultation, e.g., identifying goals, developing a contract, teaching mental skills such as relaxation, imagery, etc., frequency and duration of sessions, mental training homework assignments.)
 - (c) What was the consultant like as a person?
 - (d) If appropriate, ask how did the consultant fit in with the coach, athletes, and other staff?
 - (e) How effective was his work with you? (Probe for basis and criteria for this evaluation.)
19. Think back to how you felt just before your best international event. How ready did you believe you were at that moment? Select a number from the scale to represent the degree of your physical, technical and mental preparation.

	100% ready					Zero% ready					
Physical	10	9	8	7	6	5	4	3	2	1	0
Technical	10	9	8	7	6	5	4	3	2	1	0
Mental	10	9	8	7	6	5	4	3	2	1	0

20. What changes should be made in order to improve the readiness of Canadian athletes like you (e.g., within your own situation and within the sport system)?
21. How have things been doing since your most recent international event?
22. Do you think you are the same or a different person when you are inside and outside the competition arena? If different, what makes you a different person and what is the difference?
23. Did you shout or yell during training and competition?
 - (a) If yes, why do you shout?
 - (b) What do you think or feel when you are shouting?
24. Have you ever knocked out your opponent? If yes, what did you say to yourself when it happened?
25. Which area of the body do you like to score points? Why? Which area of the body do you like to focus on when you are facing your opponent in the competition arena? Why?
26. What could be done to improve the overall or mental readiness of other taekwondo athletes such as yourself?
27. (a) What would you say if someone said "combat sport is very dangerous, you can get knocked out anytime"
 (b) What would you say or think if someone asked "Are you ready to fight?" when you are doing your warm up before the games?
28. When do you plan to retire? Why?
29. What is the most difficult part of being an outstanding athlete? What is the most challenging part of being an outstanding athlete?
30. Is there anything else you would like to talk about?

APPENDIX B

THE MENTAL ASPECTS OF TOP CANADIAN TAEKWONDO ATHLETES

Age :

Gender :

Marital Status :

Ethnic background :

Education background :

Profession :

Taekwondo background

Age started :

Age became serious :

Years of involvement :

1. In your opinion, what percentage of National Taekwondo Athletes Performance is mental?

-----%

COMMITMENT: To excel at anything one must have, or develop a high level of commitment, passion, joy or love for what one is engaged in. Commitment provides the intensity and dedication to go after your desired goals.

2. How important is commitment for a world class taekwondo athlete?

Not Important

Extremely Important

1 2 3 4 5 6 7 8 9 10

3. How would you rate your commitment to taekwondo?

Low Commitment

Extremely Committed

1 2 3 4 5 6 7 8 9 10

9. How important is mental readiness for a world class taekwondo athlete?

Not Important

Extremely Important

1 2 3 4 5 6 7 8 9 10

10. Overall how would you rate your mental readiness for practice?

Poor

Excellent

1 2 3 4 5 6 7 8 9 10

11. Overall, how would you rate your mental readiness for games?

Poor

Excellent

1 2 3 4 5 6 7 8 9 10

FULL FOCUS: Full focus is the ability to stay "connected" to one's performance for the duration of the game or event.

12. How important is the ability to maintain full focus for a world class taekwondo athlete?

Not Important

Extremely Important

1 2 3 4 5 6 7 8 9 10

13. Overall, how would you rate your ability to focus during practice?

Poor

Excellent

1 2 3 4 5 6 7 8 9 10

14. Over an entire season, what percentage of the practice do you consider that you are fully focused for?

-----%

15. Overall, how would you rate your ability to focus for the entire fight?

	Poor									Excellent
	1	2	3	4	5	6	7	8	9	10

16. Over an entire season, what percentage of fights do you consider that you are fully focused for?

-----%

DISTRACTION CONTROL: Distraction control refers to one's ability to regain a positive perspective or effective focus when faced with distractions, negative input or setbacks.

17. How important is distraction control for a world class taekwondo athletes?

	Not Important									Extremely Important
	1	2	3	4	5	6	7	8	9	10

18. How would you rate your ability to overcome distractions?

	Poor									Excellent
	1	2	3	4	5	6	7	8	9	10

CONSTRUCTIVE EVALUATION: Constructive evaluation involves reflecting on each performance and drawing out lessons for improvement. One should evaluate the overall performance, critical components of the performance, as well as the role one's mental state played in the performance.

19. How important is constructive evaluation for a world class taekwondo athlete?

	Not Important									Extremely Important
	1	2	3	4	5	6	7	8	9	10

20. How would you rate your ability to constructively evaluate your performances?

	Poor									Excellent
	1	2	3	4	5	6	7	8	9	10

21. Over an entire season, in what percentage of fights do you do a complete constructive evaluation of your performance?

-----%

FUN AND ENJOYMENT: Fun and enjoyment refers to coming to the gym or the competition arena and really wanting to be there because of the pleasure it brings you.

22. How important is it for a world class taekwondo athlete to have fun and enjoy their sport?

Not Important

Extremely Important

1 2 3 4 5 6 7 8 9 10

23. How much fun and enjoyment do you get out of taekwondo?

Very little

Huge Amounts

1 2 3 4 5 6 7 8 9 10

CREATIVITY AND SPONTANEITY: Creativity refers to creative (innovative) thinking, always want to be different and a process into a personal expression. Spontaneity refers to a state of mind where technic application is automatic.

24. How important is it for a world class taekwondo athlete to be creative (innovative) and spontaneous in sport taekwondo?

Not Important

Extremely Important

1 2 3 4 5 6 7 8 9 10

25. How much creativity and spontaneity do you apply in taekwondo?

Very Little

Huge Amount

1 2 3 4 5 6 7 8 9 10

APPENDIX C : Consent Form

CONSENT FORM

(To be signed in duplicate-one copy to be retained by subject)

This will confirm our previous conversations and correspondence regarding your participation in a study of mental preparation and strategies used by taekwondoists in training and competition, for my masters thesis. As we discussed your participation involves one interview which will last approximately one hour. There is a possibility that you will be required for telephone follow up for clarification of your answers. Such a follow up would require no more than 15 minutes of your time. The interview will be at your convenience and date as arranged with you through the National Coaches.

The interview will be conducted with a series of open ended questions regarding the types of mental strategies (if any) you may use in achieving performance goals in various aspects of your life, particularly in the mental preparation for competition environment. As I mentioned it is hoped that this study will develop and refine a model of excellence which has been put forward by Dr. Terry Orlick of the University of Ottawa. The results will contribute to the pursuit of superior performance and will be useful in assessing the need for a mental training program for taekwondoists. Dr. Orlick is my thesis advisor and can be reached at the School of Human Kinetics (613) 564-9114 should you have any questions or concerns in this regard.

The interview will be tape recorded, and you may of course decline to answer any questions that you wish. As stated above the questions are open ended and focus on your recollection of the use of mental strategies in various situations and will pose no risk. Please be advised that you are free to withdraw from the study at any time without prejudice. The taped recording and transcript of the interview (transcribed by myself) will be forwarded to you for your approval and further comments, if any. Following your approval of the transcript the interview tape will be destroyed. The approved transcripts will be kept on file in a secure area, for future reference if necessary.

The transcripts identified by number only will be stored on a computer disk. Text portions extracted for categorisation and analysis will have names, dates, and/or references to the technical aspects specific to your games in competition, deleted. The data will be analyzed and discussed in the results section of my thesis in a way that will guarantee you anonymity. Upon completion of the analysis the computer files of your transcript will be deleted.

Please indicate your consent to participate in this study, below:

I consent to participate in the study of mental strategies of taekwondoists under the

conditions set out above:

(name)

(date)

For further information:

Investigator:

Sarah Chung
5A, 638 King Edward
Ottawa K1N 9N2
(613) 569-4488

Questions or concerns:

Frank Reardon, Ph.D.
Chair
Faculty of Health Sciences
Human Research Ethics Committee
Office of the Dean
451 Smyth Road
Ottawa K1N 9N2
(613) 787-6705

APPENDIX D : Letter of Information

Date

Dear (fill in taekwondoist's name)

This will confirm previous conversations and correspondence with the Canadian Taekwondo Association inviting Canadian top taekwondoists to participate in a study of mental preparation and strategies used by taekwondoists in training, competition, and in life, for my masters thesis. Your participation would involve one interview lasting approximately one hour. There is a possibility that you would be required for telephone follow up for clarification of your answers. Such a follow up would require no more than 15 minutes of your time. The interview would be at your convenience and date as arranged with you through the National Coaches.

The interview will be conducted with a series of open ended questions regarding the types of mental strategies (if any) you may use in achieving performance goals in various aspects of your life, particularly in the mental preparation for competition. It is hope that this study will develop and refine a model of excellence which has been put forward by Dr. Terry Orlick of the University of Ottawa. The results will contribute to understanding superior performance and will be useful in assessing the need for a mental training program for taekwondoists. Dr. Orlick is my thesis advisor and can be reached at the school of Human Kinetics (613) 564-9114 should you have any questions or concerns in this regard.

The interview will be tape recorded, and you may of course decline to answer any questions that you wish. As stated above the questions are open ended and focus on your recollection of the use of mental strategies in various situations and will pose no risk. Please be advised that you would be free to withdraw from the study at any time without prejudice. The taped recording and the transcript of the interview (transcribed by myself) will be confidential and a typewritten copy of the transcript will be forwarded to you for your approval and further comments, if any. Following your approval of the transcript the interview tape will be destroyed. The approved transcripts will be kept on file in a secure area, for future reference if necessary.

The transcripts identified by number only will be stored on a computer disk. Text portions extracted for categorisation and analysis will have names, dates, and/or references, deleted. The data will be analyzed and discussed in the results section of my thesis in a way that will guarantee you anonymity. Upon completion of the analysis the computer files of your transcript will be deleted.

For further information:

Investigator:

Sarah Chung
5A, 638 King Edward
Ottawa K1N 9N2
(613) 569-4488

Questions of concerns:

Frank Reardon, Ph.D.
Chair
Faculty of Health Sciences
Human Research Ethics Committee
Office of the Dean
451 Smyth Road
Ottawa K1H 8M5
(613) 787-6705

Once you have indicated your desire to participate in the study and the coach has arranged a convenient location and date for the interview I will be contacting you to confirm the interview and forward a consent form for your signature.

I hope that you will find time to participate as we feel it will be a valuable experience. In the meantime if have any questions or concerns please do not hesitate to contact any of the people identified above.

Your truly,

Sarah Chung
Graduate Student
Department of Human Kinetics

APPENDIX E : Sample Interview with Athlete B

1. What do you consider to be the major achievement(s) in your life?

B. My major achievement in my life is silver medal in 1992 Olympics and 1991 Pan-Am Games where I won gold and third world Cup where I won gold. I think those are three major achievements that I had so far.

2. How long have you wanted to become a world class athlete? How important was becoming a champion to you?

B.. Well, It took me more than 10 years of training and it took me close to 14-15 years to become world class athletes that is quiet long.

B. Well the proses was very difficult to explain but I needed to train hard and I needed to invest a lot of time, I don't know how many hours of hours in minutes and seconds that I have put into training but it took me more than 15 to 17 years to becoming a champion. It was important because I set my goal that I want to become my best, the best in the world and that was my direction that I was going and it was everyting for me in terms of time, in terms of family and other thing that I have to face with but I let that down to get my goal to strive for the goal that I was aiming at.

3. Have you ever doubted that you could achieve your goals? If yes, why did you lack that belief? If no, what made you believe in yourself?

B. Yes, there is a lot of doubt but training overcame the doubts, that I was able, capable and had ability to kind of foresee my goal that I was going to win and I was going that I had a shot, I had a good shot to become a champion so I knew that I was going along because I was making progress. Why did I lack that belief, because sometime I lose in the competition, sometimes it could be training, it could be family, it could be school, it could be a lot of other factors that affecting me, to stop competing or to stop to strive for that goal and I overcame that because I knew that I set a goal and it was serious one and I knew that I have to go for it which I did.

4. Do you set specific goals for yourself with respect to your taekwondo?

(a) What type (ie. long term , short term)

B. My goal will be either become a coach of the provincial team or national team or what so ever if I do compete then that would be my goal. My short term goal is that I have to get my education so I'm striving towards my education and that would be a plus for me in the future so that's short term goal and my long term goal is that I want to become the leader of the taekwondo society or why not because I want to give them a great hope of future for youngsters to learn taekwondo and to know what taekwondo is and so they may also become like me or even better than me.

(b) Do you set goals for each practice session? What type?

B. Yes, practice session yes, of course I have to set up goal for practice session because that would kind of motivate me to go, motivate me to go and learn about taekwondo and you just cannot learn taekwondo in one day, you just have to keep making short term and long

term goals and not giving up, able to stand up, back stand up right away again, back on your feet again after you lost, losing is part of learning taekwondo too, you have to lose properly, some people just abusing use it and they just forget about everything but losing is part of learning too and injury is also one place that you might want to recover fast so that you may compete for long term and that kind of thing would just, would help you in terms of for the future for leading to a long term goal and each practice session would yes, would help to reach that goal more quickly.

5. Is there anyone or anything you think was essential to your success? For example without them or it you could not have achieve that?

B. Yes, first of all my family, ah..the most crucial thing because they have to suffer for me to compete nationally and internationally and that is they always on my case, supporting me whenever I went, they were my strength when I was fighting, when I was competing at the national level or international level which I had to do and ah...I have a believe and it was a very strong believe that I will win and I am going to do it and that kind of motivating me to continue to ah...succeed in my career as I went along. Without them I couldn't have come this far and I couldn't talking to you right now without them because they were always at my back and they were always pushing me 100 percent and because of that I have to get up and run or whatever in the morning or do extra training because of that and I knew that because of me everybody was also suffering because of me, you know ..what I was going through and they knew that or when did they have to support me for me to succeed and for them to feel happy about it.

6. How do you approach practice sessions in the taekwondo training program?

B. I think actual preparation start at home or school for that training because at 3 o' clock I get up for school, my mind is already in taekwondo and I knew that what I have to do in this practice to get the best out of this time and I knew that before going to the school, I will set up a strategy what I will work on today and what I want to practice on today if I was lacking some kind of training, I would think before I going to the practice and get rerady, so I actually I am preparing mentally before practice and that is important and rest also important, sleeping in the car or sleeping in the bus, that kind of help me because I knew where I was standing because if I get into practice right away, I don't know where I am going, I didn't have plan, I didn't plan anything or if I didn't plan anything then I don't where I was going, I was just following the instructions which means I am being a machine and I didn't want that and I want to have my own character, I want to have my own strategy, so often most of the time before I went to training, there was a strategy, somewhere you know or plan before there was like a some kind of motivation that I had, I have to have before I get into training other I wouldn't train. Of course I do mental practice is very tense, very tense because that mental practice will prepare me to adapt to any kind of situation that will happen in the practice and that was a very crucial thing actually in terms of my success and either winning a medal in the international level and that training play a crucial rule.

Do you have ways of preparing yourself to get the most out of these sessions?

B. Yes, I often sleep like I said, I go through like fighting tactics or strategies before I

get into practice or I eat or I listen to the music or I think about something that happened the day before or the week before or the month before and if somebody was better than me then I knew that I have to prepare for him too that night so that I wouldn't make it equal so that I would improve myself and not just ignore the defeat during the practice, so I will move on.

7. Do you think that you trained differently than other athletes in your sport?

B. Obviously yes, the biggest enemy was within myself, other people was just target for me, it was a target to me because taekwondo is an intense distance game that if you look at them as a target is much easier for me to get ah...the chance of winning is very high because you look at them as a target. Yes, I have to train differently because in order to become the best, you have to sacrifice yourself in any situation, in any way, so, training was always constant wherever you are, wherever I am, it was always there for me.

How did you get yourself to push, or train, when you didn't feel like it?

B. Well, basic thing was to motivate myself that was the key, something had to motivate me, if there was no motivation, there was no self will to prove myself I had but that motivation could come from my family, that motivation could come from my desire to win, that motivation could come from my teammate, it could be any kind of reason that I will see that only one thing in my mind is to win, that is the only thing is to become the best in the world, that would push me. Almost every training, I push myself 100 percent, the thing is that about training I didn't want to waste my time that if I knew that I am wasting my time, I would right away rack my sack, and I know I am wasting time so I push myself more and more, or our teammate could change the mood of training or the spirit of training so that everybody could wake up and just get into again hard training.

8. Do you think that your mental preparation differed from other athletes in your sport?

B. Well, I think is basically same but some what different, because I might be working on, I might be thinking about something that I have to work on, they might be thinking about something that they have to work on, so ah...in terms of strategy and thinking ability, I think is different but in generally, I think is about the same because they all aiming at one thing and is important to decide who is more focus and I think that would determine the outcome.

How did you spend the day before competition?

B. Basically, I would have enough rest, ah...I think that is the key, and relaxation is the...relaxation with some nervousness, I think was the key to my mental preparation, like I say before, continue mental training wherever you are, think about the strategy that I am going to use at the competition, I actually think about the referees, I actually think about the floor that I am going to be in, I actually think about the timing, and I catch the timing, the time or period of the competition or the match so I actually plan out the whole strategy that I would need for each fight that I am going to create, I don't know who that I would expect in nationally, I would expect someone to come out that I know then is easy for me to calculate what's that person's techniques is, for internationally if I know that person, I have to do very good communication with coach and that is the only way to that other than found out his weaknesses so I would imagine myself to be in the competition.

Do you pray or go out to watch movie or do other activities?

B. Actually I try to ah...ya, relax sometime but not go out for movie or something like that but just to relax concentrate on my weight, and actually just relax and massage and that's about it, I wouldn't do something that are particular in a normal day but I would just have a lot of rest, I wouldn't moved around too much or I wouldn't do something which is outrageous or something that I would do daily like normal day, I would just rest, physical rest and mental rest, sometimes I listen to the music, write diary or read book and that kind of put off competition somewhere else, I think of the competition may be just before going to sleep or in the morning or in the afternoon once in a while but not constantly, not constantly but I would be very curious that who would be competing because is a combat sport so if it is a bad and I am very curious and if I have to work on something else about that person then I would yes, concentrate, may be even whole day about that person if I want to beat that person in the competition like the 1988 Olympics trial.

9. Do you have any problems concentrating during the match (in training) (or appropriate phrase)?

B. Not really, focus is good, ah....during the competition is do or die, you know is either you win or you lose that there is no time to think about something else or anything else so I am fully focus, 100% focus.

10. When you were called to "on deck" in your most recent international tournament, were you ready?

B. Yes, I was. My most recent and important tournament was the Olympics right, in the final against Ha Tae Kiong, is 70 to 76 kilogram maximum, and ah...I was VERY calm, I don't know..I was very calm and I didn't worry about the opponent but eventually I lost the final game by 3 to 2 points was, yes, I was ready back then because I knew that I was in a right time and ah....the peak level of my cycle from my training so I was very calm and I was so peaceful and there is no doubt about it, but sometimes I wasn't ready because may be I worry too much about the opponent or I will be just thinking about not concentrating on the tournament but tinkering about something else then I will call it, not ready to fight, but once I got into ring then it's different story. I don't know what I would do, I don't even know what I would do.

If not ready, what was missing?

B. May be, if that...I don't know that calmness or the relaxation that I was missing, because sometimes I am very nervous because of the competition, body very relax inside though, I know I have a believe where I have control over myself and I knew that I would do well against the most toughest opponent but if I wasn't ready, just coach, coach would help me either he would talking to me or he would tell me to do this and do that and I would just follow and that kind of relax me, also if that's a coach that I would trust him then that could be also another factor that make me prepare, he would use to tell me that tactics and strategy that I should do with that opponent before hand so that I would ready.

What might have helped? What would you have done, if you could have done something differently?

B. Basicly if I am not hyper enough or if my energy level is so low, I would either jump, run or strength or do something that would motivate me, or get into the games like break the

tension break the ais, so I could get in to it and focus because when you were outside the ring, you always relaxing, you are not as focus as wen you are in the ring, so before get into the ring, I would do someting best that would motivating me so that may be I don't know lifting my leg up fast or go through my practice routines or may be kicking or steping or someting like that, something that would assure me, so and motivate me before getting into the match.

11. Did anything unforeseen happen, either before or during your competition(s) which may have affected your performance, for better or worse?

B. Basicly when you get into the ring, you would know how tough your opponent will be, and if you lose the points in the first round or if you behind then you would affect my point. For example, in 1988 Olympics, my first and very first international games when I was 17 years old, it was my bronze medal round, I was and I knew that I could beat this guy because I had better tools, I have better techniques, I just knew tat I could beat this guy but what's up was that because I was looking at the medal, I wasn't paying attention with my games. So that disturb me but the reason that I was that because he was around the circuit for almost more than 15 years internationally and I was only the new comer and he uses every tactics that ahead of me and in taekwondo if I punch the chest that would be, tat should be a point, during the competition, I punch his chest, but he crab is neck, so warning, when you hit the neck that's mean at that time was minus point minus point five. So actually he was facking, so because clearly te video shows that I hit the chest but he was crabing his neck and start rolling, so that is the reason I lost but what I learned from that game was that medal whatever you do, it shouldn't affect you, you should focus, concentrate, on that game right, you would have the best performance out of that game, so just getting the medal was so anxious and especially in Olympics and it's the first time taekwondo has been at the demonstration sport at the Olympics so I think that dramaticly affect me and turn my all other function off from the normal level ability to perform, it turn it off because of that.

What were you thinking or saying to yourself at that time?

B. Because I was so frustrated, frustrated because I knew that I could beat this guy I was keep saying you have to get the point, you have to get the point, you have to get that point, that's how I was saying to myself but I didn't know how because I didn't want him to touch me even touch me or getting near me because I knew that I was winning, and just looking at the bronze medal and whatever it just turn everything off for me and now I am getting better of it but before it was whole different story and at that time, I was just keep saying to myself I have to get the point but I would do nothing to get that point which means that I am not performing at my peak level.

Were you able keep "on track"? How?

B. Well, I was kind of lost to myself but towards the end, ya, I was on track but then again it was too late, the time has run out and I get the minus point five deduction, and which I shouldn't have gotten in the first place, therefore I lost the fight, and kind of bitterness that I felt as a freshman at the competition. How to keep on track, by playing myself into the game again, by thinking about the strategy, by planning out counter reactions, ah... just being on track and focus on the game, just brought me to the game right away again and the whole

medal thing didn't appear to me back then when I was in on the track because that didn't matter anymore because I have to win and before around second round I didn't realize that I was winning so therefore I didn't do anything I could have score many points but I didn't do anything at all to win the game and that was your a big mistake.

12. What was your goal for the most important event (Olympics, World Championship, World Cup etc.)? Did you achieve it? Before the competition(s) began, did you believe that you could achieve your goal? If no, why do you think you lacked that belief?

If yes, how did you develop the belief that you could do it?

B. Olympic Games 1992 and of course winning was my goal and that was the most important event and that would be the most important goal that I had to achieve from the competition, I didn't achieve the goal but instead I achieve silver medal but I am satisfy with it. Before the competition began in a way I believe I could achieve it, I kind of seeing myself being there but once I got into the ring I knew it was difficult, right away I knew that. It is a feeling and there was no..I couldn't find or no weakness or I couldn't find the spot to have, to get a point on it and he was so difficult for me to play mind game because at the final fight I learned so many thing because he was very quiet fight but there was so much mind game playing between him and me, there was so much mind game and the point that I gave to him, the point that I lost to him was very basic mistakes that I made. I lack of that believe because he was more experience, he knew that that what I was going to do next move and he exactly knew what he would do. So he was looking at two point of view and I was looking at only one point of view which made me less ability to compete with him because he has more tools to work with and more experience. First round was great because I knew thyat I have the possibility and I have a great shot at it but once I got into the second round and third round, I started to deteriorate and kind of got into his psychological game which gave me a great difficulty in the game.

13. What did you do to get yourself mentally ready, if anything? (Probe for details about source of ideas, actual strategies, and mental training practices in terms of when, where, how often, with whom, and with what success.)

B. One thing motivated me was the support that people have for me and back in canada and that was keeping me going, another thing was I was writing diary and that kind of keep me going because I will write the thing that what I would feel through feeling and that would kind of motivating me to go one more day and I would do just a lot of conditioning, I wouldn't working too hard before the competition but just prior to the competition, I would do a lot of conditioning either running or either intense 30 minutes work out or whatever it is that would be necessary and I would concentrate on eating, eating, eating because I think that would greatly affect my performance also and same thing like before every competition , I would go through this mental games and try to imagine that I was in the game again and go through all the possibilities that I have to overcome. In my diary, basicly I would count the day from Toronto till the Olympics, so I would count from one year before how many days to go from the diary and I would keep that counting until I get to the final day and that

motivated me greatly plus in the diary I would make an analysis of the training schedule or the training tactics or strategies that I have to go through and sometimes my diary could become investigation just basically a lay of plan like what I have done in the training or what I think would work and stuff like that so basically became a practical book to kind of lay out the ideas of the game.

14. We are interested in the kinds of things that you generally do and think about on the day of the competition. How do you start preparing for your event that day?

B. From getting up, first I was very content about my weight so I go to washroom then I lose through the urination then I go to the weight in if I make it, I would slowly eat liquid food, liquid or soup or something which is light for the preliminary round and then after that if I make it to the quarterfinal or whatever, I will keep feed on the liquid, and also some kind of solid food to back me up and I would just go to sleep, take shower, for example, I would love to take shower after each fight that kind of fresher me up, after the shower, I would put on cloth, like very thick cloth and to go to sleep and put my leg up on the wall and to go to sleep and wake up and again get ready for the next fight in prior to the fight and I would just think about the next person so that I would lay out the plan again to beat him and just get the general idea what techniques that I am going to use to defeat the opponent, the next opponent. So basically what I would do during the day and I would have to sleep and shower and a lot of strengthening. In competition usually I would bring two or three dobok (uniform) and I usually bring along like a sleeping bag or something to sleep in because that's keep me warm and that circulate my blood and circulate everything that in me so I feel not cold or rusty or even to hard but I would just want to be less bore, just want to heat my body temperature, so I don't want it to go down and high so that's why I did that.

Did you pray or self-talk?

B. Yes, what I would do is that I would get up and I know is a big day but I wouldn't talk to anybody and it was a whole new different world for me because it's tough to talking to yourself and keeping yourself in control because you know is because I never using you and it's not on them and you know that if you...I knew that if I could win over myself, I knew that gold medal was with me and that's why I knew and if I try my best, if I try my best and if I lost and I will happy with that but otherwise if I didn't do my best but i lost then I would be very frustrated and very stress out. Because I am Christian, I always read the bible and bible sometimes inspire me everytime inspire me and I pray and I look thing in a broader way.

Do you usually follow a specific pre-competition plan prior to your events? If so, please outline.

B. Yes, I would make a chart or some kind of a track down on how many sparring or match that I should have before the competition and if their competition that is not...ah...little far away from the main competition then I would fight just to see what I should practice on and if not, I would training intensely towards the competition and I would track down how many fights that I have and how many rounds that I have to have before I am going to the competition. In competition, you are like camper, you have to bring a lot of things especially cloth, especially everything that you would need like walkman, music just to relax yourself

and to motivate you and those are the thing that I would bring dobok and water bottle and stuff like that and have speed and well prepared.

Did you follow that plan for your International event(s)?

B. Yes, I need to have my regular dobok, I need to have my regular target, and my regular head gear, guards and the favourite pad and favourite uniform that I have to wear and favourite belt that I have to have and one not I need those two to make me feel comfortable.

Do you like to wear new uniform on the day of the competition?

B. No, I am not comfortable with that, what I did is before we are leaving for the international game, they would hand out the track-suit so I would have one month or so to wear the uniform or one week or two weeks to wear the uniform but usually if the uniform is not given then I will wear the one that is comfortable for me or been use before.

15. What were you thinking, saying or focused on

(a) before entering the competition arena in the first round, second round, and third round?

B. I have to get a point, in the first round of the Olympic games, in the first fight, I was very nervous actually because usually the first fight are the most difficult one for me, and what I was thinking is that I have to win first fight anyway, anyhow because if I don't win and I lost first fight, what could does it do, so I knew that I have to win and I knew that I was going to win because I knew that where I was standing in the world rank and I knew the level that I was in so first fight was against Japan and shouldn't have any problem with Japan, and I knew that I have to get a point first round which I did and from there I move on. In second round, I knew that I was winning so I just want to gain more points or kick the points so I lose the points so that's what I did, and I would just controlling the game and not getting hurt because injury will be the great factor. In the third round I knew I was winning so I don't want to do something that out of extraordinary, I want to just maintain the game, strategy and maintain the score and eventually without injury and win the first and move on to the next fight.

(b) immediately before the start of your event?

B. I felt calm and right before the event took place, I was thinking about the opponent and how I should get the first point, that's the immediate action that I got.

How were you focused during first round, second round, and third round

B. Well the first round, before first round I knew exactly what he would do and I knew that I have lots information about him before the game through coaches, through friends and through other international games, I knew who he was and I knew that he would be no competition for me, so I was very focus when I got into first round and I knew what exactly what I have to do, second round same thing, since I got the point, basicly I knew that I have to maintain it and I have to keep go forward to get the point and just be cautious not getting hurt because since it is a full contact sport, and you might kick to the elbow, you might kick some place akwardly, so you would have injury, so I didn't want it that. In third round, focus, I can't exactly remember what happen but I knew that he was very not experience fighter, his basic was not there and I knew that I could play around with him, so I would have step and may be he would counter then I would take another...or I would move out or something like that to just play with him or he was just a kind of in fighter and not out

fighter because he was shorter than me so he always want to kick me inside close but I didn't let him do that and I just would cut in, and I would just block whatever he does or stop whatever he does to me to prevent it but I was going to third round, I knew that I was winning and I just want to maintain it so that just keep the strategy simple and as best as I can and just finish the game without injury.

(c) during the event or fight (when performing best, and when going less well?). What were you doing or thinking?

B. One thing, when I was fighting Iran on the second fight of the Olympics, second round, during the match I was able to think and that was the key because I was relax, I was able to think and act to it, so which gave me a great confidence, and I knew he is into and I knew that what he would do because I was able to think, I wasn't affected by the pressure of 5,000 people watching me or Canada singing into my face or coach yelling at me what to do, I was under control of the thing that I wanted to do, and I was able to do that exactly what I thought and which gave me great winner of the event, I beat the event 7 to 1 and I knew that I had confidence with that person and it happen exactly the way I plan.

How about when thing going less well?

B. If something didn't go well, I would try something else to make it go well because there is no sense of being standing there or kicking the same technique over and over because he would memorize that he would counter-react that, so I would create something that different for him to react to it so that he would be disturb by the attack that I was creating so I would rethink and have a different plan and different strategy to attack the opponent to get the point.

(d) one minute before the end of the match in the third round (final round)?

B. Basicly if I am behind, I would push or I would be calm if I need one point, I would be very calm and look for a chance because there is no sense of being hurry because you will lose the point by counter-attack so I would look for chance then I would get a point and that's the way I should win but if I'm ahead I would be just basicly mantaining the game and basicly having control or let him make the mistake to attack me so I counter-attack it, so that I would get another point, just one minute before, I would be doing a lot of stepping, I would be cutting off his distance or something just to make him not work on me.

(e) when the score board showed you were winning at the first round, second round, or third round?

B. When I get a point in the first round then my whole strategy change because after three minutes of first round, you know what kind of opponent you have, either is he a experience fighter, or he is not experience so depend on that level, I will decide what to use and I would plan out what I should do but if he is a experience fighter, before I go to the second round, I will plan out with the coach what I should do if I should keep thing that I should do before I get into the ring and I will use that to get the point. In second round something, if all thing goes well exactly same way but I wouldn't use the thing that I use in first and second round, I would again, if that didn't work, I would use something else to become to get the point from him because there is no sense of using the same thing if it doesn't work so every each round I would have a new plan for the opponent. Third round si the same thing and depend on the opponent's level so I would plan out and use the plan that I

would do.

Do you like to look at the score board? If yes, when?

B. Yes, of course, it would tell me where I am standing and what I need to do so I often look at the score point after first round sometimes when I get the point, I clinched then I turned around to look at the score board or I turn around to look at the coach or either two things either that or that but yes, the score board tell me where I stand and what should I do.

(f) when the score board show you were losing at the first round, second round, or third round?

B. If I'm losing in the first round, in second round I have to push it, I have to push to get the point back, if I lost in the first round, if I lost the point again I have to get it back but the thing is that I always concentrating on what will be at the final round and what would the score being but the thing is that also that I have the courage to come back and win over the whole match.

16. (a) What was your best ever performance?

B. Best ever performance was the third World Cup in Egypt, Cairo that was in 1989 spring, I guess..

What were you thinking or saying to yourself immediately before the event?

B. Let me think, because I beat all those strong nation, all those strong fighter and the final fight was against Mexico, and I felt just calm and I knew that I have to do it and I knew that I can't do it and I knew that I will do it, those three thing I knew it, so there is no doubt about it. Well, the different between the level of competition is speed, and at that year, I was on top speed ever when I think about myself because I push myself to a point where I can't push no more, I felt that sense of enlightenment that I knew that I was faster than any body and I was quicker than any body and I was..I don't know...everything was working out.

How were you focused during the event? What were you doing or thinking between periods of action?

B. Well, I knew that there was some kind of exchange but I knew that I would kick the last, I would be kicking the last because I will be the last one who would be kicking and what I felt was that I knew that my tempo has to be faster and my plan have to be quick and speedy so that my message can get across quickly. It's a speed, I would plan out two to three technique ahead of me because after I finished the first technique, I would not stand there just don't know what to do. I would plan out two to three techniques so that if I attack, he would counter I will recounter that until that state, until that motion, I would plan out this two or three movement ahead of me so that I would be ready for any situation.

What were you thinking or saying after the competition?

B. I didn't realize that I won the world cup because may it was break but I don't know, I just didn't know what did I won but I won and I was so happy and I felt just normal and I wasn't too greatly excited about of winning it but I just felt normal, just felt normal because my destination was not World Cup. My destination at that time was 1991Pan-Am Games because it is an official sport there and I was looking forward to that and 1992 Olympic Games and World Championship 1989, those are my destination.

(b) Now think about one of your worst performances in international

competition for that same event. Which one was it?

B. I think was 4th World Cup in Yugoslavia, my grandmother was just passed away, and everything was not going right for me and I have to fight Yugoslavian fighter at the first preliminary round, first I have to fight with it and I was just heavy, very heavy, very slow and I felt very big whatever I did and I still think I didn't lose the fight, but I lost it. I lost it was due to referee decision because it wasn't ah..come it to consensus that I would lose but I knew that I have a point that they didn't give it to me and there was some competition that happened at the very first fight such as World Championship and World Cup.

Again, what were you thinking before the event?

B. Basicly I knew that I was going to final and I knew who is competing at that competition and I knew that my goal was to get gold medal because I knew exactly who was competing and I knew exactly what to do but it didn't happen that day.

How were you focused during?

B Well my focus was good, my focus was good and everthing seems all right but I knew that I felt a little heavy. Well I lost first point I don't know that day I lost confident and I couldn't focus after that and I tried to get back into it but it was me, it was me who was fighting so It just slip the way.

What were you doing or thinking between periods of action?

B I was trying to calm down and I was trying to make a strategy and I was trying to lay out the plans but it didn't happen, thing just didn't happen that day.

What were you thinking or saying after the competition?

B. Yes, I have plan to improve for the future, I definitely thought that I would go back to Canada and look at the Video tape and examined what I have done wrong and what I should improve and that was my next step for that person for the other international competition.

From watching the video tape do you do any plan from it?

B. Yes, I will memorize that person habit of doing such as action or what is favourite leg is or what is his weakest point is and I would just kind of imagine what I have done in that situation and I would kind of rethink about myself how I should lay out the plan again if I would to fight him again so basicly I would have more time to think about the strategy, I would have more time to investigate and analize the fight so I wouldn't know what to do with that person again, next fight.

(c) What were the major differences between these two performances in your preparation, thinking, feeling, or attentional focus?

B Well for good competition, you just feel normal, you just feel calm, very calm and you will very calm into it, just into it and without realizing you are into it but for worse competition, you know you have to catch up, you know that you have to ..ah..you are not as calm as before or you are not as structive as before or you didn't lay out the plan or something didn't go well on that day so those are the differences but if that day is meant for you, everything will work out under your consent, under your control, everything will happen to you.

Do you have ways to improve the overall strategies?

B. One key way is to relaxation but is hard to get and is different for every competition. For example, Olympics was different, World Championship was different, Pan-Am games was different, every competition that I have to prepare and I felt different for each

competition and for each fight and I don't know relaxation was the key but relaxation, you can relax but you have to be able to think and act with and I think that's what will make you improve because if you don't think and act to it, then you will not just do anything at all.

17. What role, if any, did your coach and/or others, such as Consultants, play in your preparation? In what way, if any, did they help or interfere?

B. Basically is the game of team work, is individual in the ring but what motivates and keeps us going is our team spirit is down because someone lost or someone is defeated, then the next person is also down because of that but what we are trying to do is we are trying to create so much team spirit that we will be behind that person 100% or my teammate will be behind me 100% when I am competing, cheering me on or whatever they do, even coaches, they would tell me, be beside me to secure me, to tell me what to do and tell me what thing that I needed to improve this game and would tell me or what chances I should take for the game and other people such as team members and other coaches would greatly motivate me just for the sake of country of Canada, and I just doing it for the history and for the country, so there is a lot of encouragement and team spirit.

How do the team members get along?

B. Very well, we got along very well because since we knew that exactly how many people wouldn't make it, how many people would go to the international game and because we all went to Korea to train and that is the starting point where we met each other and those people went to Korea and who train hard in Korea, are made into the national team do we knew exactly what to do and we just up there with all other international teams who are power house of taekwondo in terms of team spirit, we knew exactly where we are getting into, and we knew that we are fresh and young in terms of competition, but we knew that we went through the hard training so we knew that we had a great team spirit to take a shot at the international game.

Do you think your teammates help you in your mental preparation? If yes, how and in what way. If no, did you do something about that?

B. Yes, greatly. We talk sometimes we share, sometimes you take a partner and you practice together or with the team you practice together, we have a great, great team spirit, their spirit help me to lighten up and to give me more energy to fight for Canada.

18. Have you ever worked with a sport consultant/psychologist for more than one session, please answer the following: NO

(a) What brought you together with a sport consultant?

(b) How did you get started? What did the consultant do first? What did he/she ask you to do? What did you do? (Probe for details about the consultation, e.g., identifying goals, developing a contract, teaching mental skills such as relaxation, imagery, etc., frequency and duration of sessions, mental training homework assignments.)

(c) What was the consultant like as a person?

(d) If appropriate, ask how did the consultant fit in with the coach, athletes, and other staff?

(e) How effective was his work with you? (Probe for basis and criteria for this

evaluation.)

19. **Think back to how you felt just before your best international event. How ready did you believe you were at that moment? Select a number from the scale to represent the degree of your physical, technical and mental preparation.**

	100% ready					Zero% ready					
Physical	10	<u>9</u>	8	7	6	5	4	3	2	1	0
Technical	10	9	<u>8</u>	7	6	5	4	3	2	1	0
Mental	10	<u>9</u>	8	7	6	5	4	3	2	1	0

20. **What changes should be made in order to improve the readiness of Canadian athletes like you (e.g., within your own situation and within the sport system)?**

B. Well basically preparation for the training, training is the key to success, because at trianing, you will face with any kind of situation that you have to face at the competition and if you done enough training then you would cover all the areas that you would need to be the best but if you didn't cover that then you will be face in the match and you will be to late to react to that, so training, I think is the key to the success and the key to the open door. Within the sport system, basicly they need organize training, they need either provincial team or national team, they need some kind of camp or some kind of intense training period before prior to the competition to built up the team spirit, I think that is very important to have.

21. **How have things been doing since your most recent international event?**

B. Well, I knew that I do something for Canada which I did, which I don't regret and is the pure self-satisfaction because taekwondo is such a low profail sport in Canada, that it just come to you and that's all it's about it, you and your family and your friend will share all the glory. Yes, Olympics is the big event, Olympics is very well recognized in the Canadian Society, so whenever I told friend that I have been to Olympics, they were very surprised because they think that only specific people go to the Olympics.

22. **Do you think you are the same or a different person when you are inside and outside the competition arena? If different, what makes you a different person and what is the difference?**

B I'm different, in competition I try hard and I think that is the end of the world but out side of the competition arena, I like to be myself but not as serious as the competition. Well first of all taekwondo taught me many thing, one it taught me dicipline, one thing it taught me respect, and another it taught me is self worth to do anything and because of taekwondo, I would be able to use that same energy in terms of my life and what I could get out of this life and that's what give me going until this moment.

23. **Did you shout or yell during training and competition?
(a) If yes, why do you shout?**

B. Yes, of course because we say "Ki-hap", it means bring your energy together into a

motion which means that you would have, you would believe that your kick or your punch will be the strongest to be at the maximum energy level, so and shout and plus it kind of get you going, kind of get you into the game, get back into the game, and kind of bring your confident level up by shouting.

(b) What do you think or feel when you are shouting?

B. When I'm shouting during the game, I shout when I'm getting a point to convince the judges, to mark the point down because you will clearly show the judges that I have got the point but without given the point if I shout then is useless, I shout because most time that I get the point, then I clearly make the judges know that I get the point, that's why I shout. I feel that by shouting that I feel that I'm more quickly and faster and by doing that I'm bringing my confidence level up again.

24. Have you ever knocked out your opponent? If yes, what did you say to yourself when it happened?

B. Yes, It's a natural thing, he just walk in, I span or I do something and basicly he got knocked out by his force coming in with my force going out so we have two impact forces clashing and you just felt that he is down on the floor or like he is down and he is out and you just stand there and you don't think about anything, after a while you get out of the ring and then you think you just what you have done to them and just hoping that the medical would get them fast enough to heal the injury fast.

25. Which area of the body do you like to score points?

B Sometimes at the ribs or to the head or to the chest for fight.

Why?

B. Because I would like to ..sometimes kick there because if they are not ready yet, they wouldn't expect that area to be kick or punch by kicking the place they don't expect.

Which area of the body do you like to focus on when you are facing your opponent in the competition arena?

B I look at their eyes.

Why?

B. Because when I look at their eyes, I know what they would do, what kind of action they would create, well sometimes I would kind of look at the eyes and body, the eyes and body, but is to eyes. The body sometimes the shoulder sometimes the feet but it just a quick glance of it, sometimes I will look at their eyes and their face. That are the area that I should look because that way I know what I would do because I would feel that what they would do. By looking at the eyes, you could tell that person what they would do, by looking at their feet and shoulder I couldn't read their mind but by looking at their eyes, I could read their mind

26. What could be done to improve the overall or mental readiness of other taekwondo athletes such as yourself?

B Basicly, what I would suggest for them to

do is to go over the strategy that they would do for the match and that way they know what they would do and they would be last from the match and by doing that you also educating and telling your body to do the motion so you are also practising so it is a good idea to go

through that image training.

27. (a) What would you say if someone said "combat sport is very dangerous, you can get knocked out anytime"

B. I say that's right, it is dangerous, it's like boxing, you have to either knock out the other person, or knock out by the other person punch. What I would say if someone says that it's a sport, we have rules and you follow rules and you have to follow the rules and compete and it is dangerous but you can prevent injury and you can prevent accident to happen if you are at the right track or if you train enough. Mental skills or mental strategies are very important because most often the knock out come because of the different level, is like Wayne Gretzky saying hockey game was elementary student or by me competing with the colour belt who are in the crowd so there is a tremendous gap between them then the knock out could come up either one is very good or one is no good, then you could see the possibility of knock out.

(b) What would you say or think if someone asked "Are you ready to fight?" when you are doing your warm up before the games?

B. I would say...I would knot my head.

28. When do you plan to retire? Why?

B. I don't know I took a two years off because of my education and I think that is more important than taekwondo now for me because that's what I have decided to do, and in terms of my future, I could always fall back on taekwondo because I'm already there, I have been there but in terms of education, I need to get education done also in order to, be able to wisely plan ahead for my future.

29. What is the most difficult part of being an outstanding athlete?

B. Well sometimes it is difficult because they would expect you to do the best but sometimes you fell to do that because you are only human and some people just don't understand that point of view. It is hard to meet others expectation because they want to see something that out of extra-ordinary something that is spectacular from you and they respect that and if I don't show that, they would be disappointed of that.

What is the most challenging part of being an outstanding athlete?

B. Is to make a role, playing a role for young, youngsters because our hope is not for youngsters, our hope is not on us, our hope and for in terms of future taekwondoists, we have to educate the young kids properly and I think to become a good example of the sport and to become a good example of myself, then I could probably be challenge by playing an outstanding athlete.

30. Is there anything else you would like to talk about?

B. I think I would do the interview again. I wish I have more time to look at this question so that I could answer properly what I would want to say because sometime It just from off the head and I don't know if I understood the question properly or I answered the question properly They are some good questions here..

APPENDIX F : Sample Interview with Athlete C

1. **What do you consider to be the major achievement(s) in your life?**

C. In terms of sport taekwondo I will have to say the major achievements will be winning the Pan-American Taekwondo Championships two years or two championships in a row they held every two years and I won back to back championships so I would have to say in terms of taekwondo that probably my biggest achievements in taekwondo. In my life, well in term of taekwondo itself as a martial art was me becoming a taekwondo master, it's a very lengthy process, it does take a lot of patient, a lot of dedication and it is not something that you achieve you know without dicipline I mean there is a lot of dicipline involve, a lot of preseverance, hard practice, hard training and it taken me almost 12 years finally to become a taekwondo master and in terms of outside the sport, there is one of my other biggest achievements in life.

2. **How long have you wanted to become a world class athlete?**

C. I guess I have to say in 1985, that's when I started getting the drive to become a national champion and therefore I can compete internationally and become that type of athlete, that type of caliber athlete, so basicly since 1985.

How important was becoming a champion to you?

C. It's everything, I mean I would do anything, I would train how many hours it took, 7 days a week you know for 4 years, 2 years, 5 years, whatever goal I set up for myself, I was really basicly sacrifice anything to become a world class athlete.

3. **Have you ever doubted that you could achieve your goals?**

C. Yes and no.

If yes, why did you lack that belief?

C. Yes, in terms that there's been time where not every athlete always peak, it's very much athlete peak at certain time, you know they have a down fall, and sometimes is that down fall that's make some achievers at even bigger barrier and you know I have the doubts, I lack of that belief, basicly because of other distraction, I wasn't putting enough training in taekwondo, ah..basicly my focus wasn't there, I might go in clear what I wanted to do and therefore because I lack of that belief you know it's hard to achieve that goal and you know the other way yes. What I haven't doubt it to achieve my goal because I was focus, I was training and I knew I was prepare, I was doing everything, I knew I was prepare, I was doing everything that I knew possibly that would help me to achieve that goal.

If no, what made you believe in yourself?

C. Basicly my hard training, my hard training make me believe in myself and my friends, my teammates, they encourage me that I got from them, basicly being and focus with my achievements, setting all my goal instead and focus with those goal and not basicly getting distracted by other activities or by other things which are not related to my goals.

4. **Do you set specific goals for yourself with respect to your taekwondo?**

(a) What type (ie. long term , short term)

C. Yes, I do set my goal, I basicly set out short term goal and long term goal, yes I did. Short term goal to an athlete such as myself you know the fact that being national champion few times, to me long term goal is basicly to win the world championship, being in the

Olympics that's my long term goal, as for my short term goal, I have to win the national, national are held every year and I have to win the national because without winning the national I can't compete internationally, so basically my short term goal is basically winning the provincial games so that I can compete at the national games and then once that is done then the game is open to compete internationally, before that can happen basically you have to set a long term goal for yourself too because is not going to be your first international game like you are going to come up totally, it does take a lot of experience so you know I sick of tired of myself in terms of long term goal and what I want to accomplish internationally in terms of long term goal.

(b) Do you set goals for each practice session? What type?

C. Yes, I do. Basically for each practice I try to focus or wonder two things, I try not to focus on a lot, usually I do by the week if I decided I am going to practice in that week or not, I will decide on few techniques in each day or I will divided or concentrate in two, then implement those two proces on following practice that there is always basically something that I try to focus on during each workout and during each training and basically in that week that is related to one particular let's say techniques overall or one particular aspect of sport so, yes I do break in down every week and as well as every day.

5. Is there anyone or anything you think was essential to your success? For example without them or it you could not have achieve that?

C. Well, there is, there is a couple of thing that is contribute to my success, one is a good friend of mine that's basically has been my teammate for many many years, his name is Jae Hoon Lee, he's also been in the national team for numerous years and had many international accomplishments, basically him and I, we grew up together ande we train together and we were always supporting each other like if one person was down and the other one will always there pick the other one up, so he has played a big big role for me becoming a national champion and also becoming an international recognised athlete and the other thing that has contribute to my success, believe it or not, I think is the fact that my parents will always against it, you know my parents are never encourage me to do taekwondo, they always want me to stop and for some reason that's just give me more of a drive to keep on training, it's kind of psychology, I wouldn't say rebelling against them, but the fact that they never supported me, sometimes I think that I'm a certain people that athletes and their parents put so much pressure on them that there is so much pressure on them from other people coaches, parents whatever that they intend to lose the love for the sport and I think because I was always training when I wanted to train because I wanted to train not because my parents were pushing, I think that has a lot to do with it, so that's has to do with my parents basically.

6. How do you approach practice sessions in the taekwondo training program?

C. May be I already cover this earlier, once again I set very short term goal for each practice you know let's say today I decide to focus on my certain sparring drills and then I'll sparr and implement those drills in my sparring so I try not do that I always do, I try to focus and use it the drills that I practice and implement that in my actual sparring, so that's just one example, that's just basically how I planning to practice for myself, I try to work on something then I try to implement them with sparring or with basically you know contact sparring with chest proctector or try to implement that with those drills.

Do you have ways of preparing yourself to get the most out of these sessions?

C. Yes, basically where there are things that I don't get the most out of practice because you know some day you just find yourself more tired than others, and you know you get into and you just can't keep up with that same phase, yes, when I practice I try to give 100% percent, I don't practice 90% or 75%, when I practice, when I do if I choose to do 50 kicks I would do 50 kicks in 110% so I maximize my way of training.

7. Do you think that you trained differently than other athletes in your sport?

C. Yes, I do very much actually. I don't think other people in our sport or majority people in our sport in Canada, I don't think they have the same kind of training that we have, I have experience in a fact that I have practice for so many summer camp and train with world class athletes, you know 7 months by very recognised international coaches etc. I have advantage in terms of our training, a have advantage over and of course, that's shows internationally when we look at it, here eventhough we dedicate ourselves so much in the sport still it hasn't been my full time, it always something that I have done as part time but yet when I competed at internationally you know I always seems to be better in a country that they basically practice most of their life, they practice 8 hours, they live in taekwondo, they sleep taekwondo, they drink taekwondo, they do everything in taekwondo, yet you know so many people in our school especially Master Choung's student, we always seems to be better than these people and that's tell you something about the quality of the practice, you know we only practice two hours a day everyday 7 days a week that's tell you something the qualities that we have in master choung school.

How did you get yourself to push, or train, when you didn't feel like it?

C. I always think this way, ah...whenever I start it's basically in my mind because your body, your mustn't telling yourself that you are tired but if you are mentally strong you can overcome that and continue practicing and the way I do is I always think this way when I start feeling tired or weak whether I'm just doing drills or whether I'm sparring, I always think that this is the last round and it's 30 second left and I'm behind and I have to score one more point, I have to score two more points to catch up with my opponent, basically, I have to just attack, I have to be aggressive and that's how I push myself in time when I'm tired or something like that, I always think ok, this is the final, I got 30 seconds to go, I need to do you know one more kick, I need to get two points or one point etc..

8. Do you think that your mental preparation differed from other athletes in your sport?

C. Well, I guess it's hard to say because you know I don't think people really share in terms of how they prepared themselves mentally ah...I do know that however mental preparation is very important and sometimes it's mental preparation that distinguish between winning and losing when you have an athlete for example, when you know that you are against an athlete that perhaps may be technically better than you but you can prepare yourself mentally that you can beat this person, then you know I think you can do it. I think it's difficult to say that my mental preparation is different, I'm sure it is because I think everybody somewhat various differently how they prepare themselves mentally, so I think everybody has a little bit different way of doing it.

How did you spend the day before competition?

C. It does funny because it keeps changing, sometimes a lot more relax, sometimes I try

not to think about the competition, I find that as I, I guess at the national and international competition, I found that I had to think less and less or worry less and less, I remember a few times when I compete internationally or even nationally you know like the night, the day before I couldn't stand still, I have to practice you know I have to do so much think about Oh my God how am I going to fight tomorrow and this and that now I don't really think about practicing too much, I just think about having a good meal, sleeping, getting good rest and I do go over a little bit about certain thing that I want to focus on, you know if I know that before the competition is been certain weaknesses in me or there's been in certain strength, I'll try to focus on these strength, if anything that I would like to do, I'll try to think positive, I'll try to have a positive out look such as you know I'm not going to bother me who I fight first fight, you know I try to have a positive attitude, you know, I can win, I can win, I can win, basically that kind of attitude, I can win, I can win, I can win, it's better than going around saying Oh god I'm not ready and this and that, at least if you keep telling yourself you're ready, you're ready, you're ready, you know you can win, you can win, you can win, at least you're staying in positive, you know it's better than kind of blaming yourself didn't practice hard enough stuff like that.

9. Do you have any problems concentrating during the match (in training) (or appropriate phrase)?

C. During the match, no, actually, if anything I think that seems to be one of my strongest points, I'm usually very very focus in my matches ah....It's almost like I can't hear anything, the only thing I can hear is my coach, I can hear my coach and I can hear my opponent but no matter how much noise the crowd is making, I can't hear the crowd, so ya there is like a lot of, a lot of concentration, is almost like a religious thing or something, you know it's like this ah...there is a lot of concentration put it this way and the outside noise no doubt it, I don't hear it and I only think about what I want to do, what I'm thinking my opponent is doing and my coach. So no I don't get distracted, I don't get distracted, sometimes when I get frustrated, It seems like distract me because I start getting frustrated when I get frustrated you start to panic and when you panic you can't think straight so the time like that I try to just basicly not attack and not become aggressive because when become aggressive I'm just going to get emotional excited, emotionally basicly is not going to allow me to see my opponent clearly so I'll just to relax at that time. In training, ya, sometimes I get distracted, there is always a little thing here and there that happened that causes in our cry or laugh or ah..you know sometime it's not that if anything distract me sometimes or make me lose my concentration when not everybody put 100% eventhough when you competed, it's an individual sport when you compete, you are there on your own, when you train, it's very important that everybody train as a group and sometimes I say the really really great athletes are those that basicly practice by themselves you know but you can't achieve or basicly this is a sport where you have to be able to practice with other people so that you can sparr with them and stuff like that, is not like diving or you know you just basicly do your own thing, you are not competing against opponent, you just have to practice over and over and over because you know this is what you are going to do in competition so in training, you do the same over and over and over, Here you can practice by yourselves but you need other people, you need your teammate because you need to sparr with them, you know you need to make contact with them etc., so when other people are not training as hard then that's kind of distract me because I'll get frustrated, you know I don't....I say to them you know why you

are here, you are not going to be here to train 110% why you are here, so in that case don't bother to show up in practice. That's type of thing so that's probably my biggest distraction or that takes my focus in training, is when people are not training or basically putting 110%.

10. When you were called to "on deck" in your most recent international tournament, were you ready?

C. Yes, I was. When I was called to on deck, I felt ready but yet I felt that there was ah... my body a little bit heavy, that is my most recent tournament which was in Capman Island the World Cup Championship, when I was called to on deck before that I felt that I did all my training, I was ready and everything, I was mentally strong but when I was warming up for the competition, my body felt very heavy, and that's not a good sign because you want to go there and feeling light, and I felt heavy so when I was called, I thought that I was ready but physically my body felt very tired but I knew that mentally I was ready and I try not to let this thing bother me, I was prepared to take on my opponent and so I try not to let it bother me and it didn't you know my first match and stuff like that, it didn't.

If not ready, what was missing? What might have helped? What would you have done, if you could have done something differently?

11. Did anything unforeseen happen, either before or during your competition(s) which may have affected your performance, for better or worse?

C. In most recent, you can say at before my second match, before I went out for my second match before when I was warm up, I started feeling shape pain in my ribs and I didn't know what was the cause because I didn't feel anything in my first match, I didn't feel anything so but basically when I was kicking, I felt the very shape pain in my ribs, so I didn't know what's the main cause perhaps I got kick in the ribs and may be there is a fracture or something or may be was just a pull muscle, so that have to be worry because you are really felt the pain and it was a really strong pain before I went into the ring but from previous experience I know that when you got into the ring, you don't feel these things you know, it's amazing how normalpreviously from experience and competitions etc., I know that usually when you get into the ring, this thing usually you don't feel there is bruises and pain, you're so focus on the competition, on the match that you know you forget about the pain and but I was a bit consent me though, but once I started for the competition, it just at my second match, I didn't feel it at all.

What were you thinking or saying to yourself at that time?

C. At that time, I was trying basically think positive, I'm not going to feel this pain, I'm not going to go away that kind of thing, I was basically saying when I got into the ring, forget about the pain because when I was warming up, it was affecting me, once again I was getting frustrated because I was kicking and Oh my God, I have this pain here and how am I going to fight and this is the very important fight, in my second fight it was very very important, actually it was my third match, I'm sorry that it was very very important because this was my semifinal you know and I knew I was against the top guy in that competition, in that weight which is from Mexico and I knew he was the top guy, he is the one to beat and I wanted to beat him so bad, and I said "them!" I've got this and may be is going to hinting me but I choose, I just basically when I get in there, I'm not going to feel the pain, I'm just go out there and fight.

Were you able keep "on track"? How?

C. Yes, I was. How, I just focus on the game, basically when I started to go the ring, I'm not going to think about the pain, this is where I have to worry about, I don't have to worry about the pain, I just have to worry about the point, my opponent, so my focus was towards my opponent not the pain, when I was warming is different, when I'm kicking, but you know there is really nobody to seriously think about, you going through the game, you going through what you want to do at the game etc., but that person is not in front of you yet and so it's different when you step into the ring, it's the time now, this is what you have to do now, so, it didn't distract me.

12. What was your goal for the most important event (Olympics, World Championship, World Cup etc.)?

C. Well, I missed Olympics twice.... World championship was disappointed, World championship that I've been to was a big disappointment for me anyway, but let's go back to my most recent, my most recent was the World Cup and I really felt that this was the time where everything was right for me to win the gold medal you know, everything was right, I practice hard, it felt really good, I felt mentally ready, I have a really good draw at the competition, I have a really really good draw and also Korea wasn't in that weight category, Korea I know how hard it is, Korea you know is always the main force in taekwondo, and Korea didn't have feather weight so it seems everything was in my favourite, I really felt that this is the time that I can walk away with the gold, and kind of shock everybody, stunt everybody but unfortunately it didn't happen but I was pleased with the result by ending up getting third place, I lost to Mexico, he went on to get the gold medal, I know that he is a lot more experience than I am, I mean he has, he starts competing internationally at the same time than I did which is back in 1988 that's when he started competing internationally as well since then he has been to lots more competitions than I have so in terms of experience he has a lot more tournaments experience and international competitions experience than I do, he is more well-known to judges and referees so I guess you can say that I lost not because I was technically weaker, I lost because of having less experience than him, I think I'm that I'm technically superior than him but because of the fight he has a lot more experience than I do, I think that is the reason why he beat me. Experience is probably the most important thing in taekwondo athlete.

Did you achieve it?

C. I didn't achieve the goal that I basically set for myself, basically before I go to the competition I didn't set a goal such as you know I want to go there and win the gold medal, that wasn't my goal you know however I did set a goal for myself which is to win a medal and I did so my goal was achieved however when I got into the competition, you know the fact that like I say earlier, it kind of make me change that goal not change it but it just give me time to set of myself hold on may be I could achieve more you know, once I saw the draw, when I saw the competition and all that, I say to myself, may be I could achieve more So I didn't fail because of the fight that my initial target before I went to the competition, my initial target was I want to get a medal, I didn't set that I want a gold medal. So, I did achieve that.

Before the competition(s) began, did you believe that you could achieve your goal?

C. Yes, I did, yes, I did.

If no, why do you think you lacked that belief?

If yes, how did you develop the belief that you could do it?

C. Well, once again, it goes back to the confident, ah....I have confident in myself, I have practice hard, I knew I just come back, we are just finished the national because World Cup was shortly after the national and I have competed very well at the national and I found myself this year 1994 has reached a different level of taekwondo in terms of maturity as an athlete, I have move one step ahead I believe, for me everything was there, I felt good, you know I know I have trained, all the ingredients was there so that's why I felt very confident.

13. What did you do to get yourself mentally ready, if anything? (Probe for details about source of ideas, actual strategies, and mental training practices in terms of when, where, how often, with whom, and with what success.)

C. Ah....Mentally, something I do for my mental, it all goes back to I think when I keep saying how much I was in positive thinking, I think very positive it can be, I try not to think negatively, I think very positively like I always reflex back on my training, I know that for example when I went to Korea to train, I know that when I train in Korea, I trained with world class athlete like all this athlete are very easily be the next world champion, the level was very high, so when I compete internationally against all these country, I know the people that I compete is not as good as the people that I train with, so by that type of training that I already had, it gives me a certain level of confidence in terms of my training, in terms of my performance in that it all turns into basicly into confidence just basicly mental being confident in yourself and your ability, so that's all I prepare myself mentally, I go back and analized basicly how I train prior to the competition and basicly I get a boost from that.

14. We are interested in the kinds of things that you generally do and think about on the day of the competition. How do you start preparing for your event that day?

C. The day of the competition, ok, I'll start basicly with a good meal in the morning, good breakfast is needed, seriously if I have a good breakfast and I have to have a good warm up believe it or not warm up is so important I mean it, I think other athlete too but I have to warm up and feel good, if I do feel good, that's give me a lot of confident, you know when you are up and kick, you feel like ok, I'm ready now, etc., when I was in Capman Island in the World Cup, it was different you know when I start warming up, I felt very tired and at that time it took mental strength to took me through that, so in time where I had a good warm up and I felt right and everything, then mental strength doesn't play such a big role however still I do that always before my competition, I kind of talk to myself a lot, I keep saying that one of the thing that I keep saying to myself is you came all the way here to win, not to lose, you know, it's always positive, I came here to win, I came here to win, to win, to win, and may be I'm not going to win all the matches but it's a positive thinking, and that positive help me, it's positive talking to myself and believe it or not I sing, I sing and it just relax me so I sing whatever song that came to my mind, I just sing, for some people, they listen to music you know other people play, I sing, I sing and I have a lot of positive thought. Not so much muscle relaxation but I guess you can say I do mental training, if I do know which opponent I'm fighting, I try to go through certain aspects of the fight, like certain thing I have to do when I'm fighting my opponent if I know my opponent but if I don't know

my opponent, then I have to say for myself, I have to set a game plan. ok, so like before I go into the ring, I have to set myself like this is I want to do in the first round, this is I want to do in the second round, this is what I want to do in the third round, I guess if doesn't happen then I have to start changing throughout the match because it is not working but if I don't know my opponent each round when I step into the ring, I try focus on the thing that I want to do each one of those, if I do know my opponent, then it's been become more technical, become more the actual thing that I want to do, that I aspect my opponent to do, then I will basicly do the how I would react, what I suppose to do, what thing that I would do, what reaction my opponent is going to take and then what actually do after so that's basicly how I prepare myself.

Do you usually follow a specific pre-competition plan prior to your events? If so, please outline.

C. Yes, first of all I have to do a lot of weight when I fight so that's basicly, when I fight, I have to lose 20 pounds, it's not very healthy, that's play a big big role in my training, so is not like days when I have to relax, I can't because I have to keep my weight down, so the weight loss plays a very big role in my competition because if I don't lose weight then I can't compete, you know the weight is the one thing, the other thing is the training, I mean like I said three months before the competition, I have to make sure that I have achieve a certain level of basicly stamina, in terms of stamina you know two months the competition, I expected basicly achieve a certain level of in terms of reaction etc., I'm not thinking about the competition or whatever, I am expecting all this thing to be altogether, and then put everything together and just keep up the practice, there is a training, there is a set schedule prior to the competition. On the day of the competition what I do is once again I always over weight the day before the competition, one thing I would not do that, I have to eat, I have to because I lost so much weight, the only way to stay strong is if I eat, because I eat, I just have to train and the eating giving me the strength etc., so the day before the competition, I always over a couple of pounds etc., yes, I do have a training schedule, when I get up basicly is eat, I always try to have short workout before the competition, make sure making good sweat, therefore after that just relax, a lot of stretching and then I make sure I have a good meal the day before the competition and eventhough I really have to be careful about my weight, I always make that the priority that I have a good meal the day before because if I don't eat the day before that, then all of the sudden after weight and sudden I eat, from past experience I don't feel good, I feel weak, or I feel full because my stomach goes mistreat, that's usually my set schedule, that's basicly what I do. On the competition day, going back to the day before the comeptition day, I make sure that I get a lot of rest, on the day of the competition, basicly is the same thing, getting a good breakfast after weightin, I make sure I make my weight, after that make sure that I get a good breakfast, rest and after that get a good sweat, not a good practice but just a short warm up, making it sweat before I step into the ring.

Did you follow that plan for your International event(s)?

C. Yes, I do.

15. What were you thinking, saying or focused on (a) before entering the competition arena in the first round, second round, and third round?

C. Ok, once again believe it or not, if i know my opponent, I try to set a target for

myself usually in the first round, make sure I score one or two points, be ahead, come back, be ahead in points, second round if my time is in schedule, second round is for me to relax, then my opponent come to me and basically take advantage of that. Let him make the mistakes and I take advantage of the mistakes and then third round basically relax, try to stay in injury free, try to prevent injury so that I'm ready for the next competition but if I don't know my opponent, if I don't know my opponent then it's different, once again, if I do know my opponent, every round I'm going to try to do this, in terms of goal, it's still going to be the same thing, I'm still to be ahead of points one or two points ahead of my opponent in the first round, second round let them come and then score more points, third round sit back and let them do the mistakes, if I know my opponent, I actually think about which techniques I'm going to do to score points to my opponent, I also focus on certain thing that I know that person is capable of scoring points because of certain circumstances that I behave, if I know that person that I'm sparring and I know that if I spin, he is going to counter when people spin, then I try to do technique that don't involve spinning because he is going to hit me, so I try to think about those thing, actually techniques that I'm going to do in the ring.

(b) immediately before the start of your event?

C. Once again, I guess you can say is choose positive thinking, I would choose like real train myself that I can beat this person and if I stick to my game plan, I will beat this person, I will beat this person, it's just positive thinking, mostly positive thinking.

How were you focused before the first round, second round, and third round?

C. Just self talk, base of self talk, it always help when you know your coach encourage you and tell you, give you relax, positive talk, you are ready, let's go and get him etc., the first round once again is mental preparation mainly talking to myself, in second round, in between round I analyzed thing that happen each round, if I do the thing that I suppose to do and it cause me to lose points or what ever, basically I just come back and say how could I make that, how could I correct that, how could I go out there and score the points, how could I go out there and not lose the points, basically how could I go out there and beat my opponent, you know or if I found I'm ahead of him, how am I going to do to stay injury free, let my opponent attack me and I take the advantage of that.

(c) during the event or fight (when performing best, and when going less well?).

What were you doing or thinking?

C. During the fight, it just basically thinking about the techniques, just try to figure out my opponent, what's my opponent trying to do, what's my opponent thinking, what is he thinking that I want to do, you know if he's thinking that I'm going to do this, then I have to do something else. So basically trying to figure out what is he thinking what is my next movement be, and I'm trying to figure out what he's movement be.

(d) one minute before the end of the match?

C. Ok, this goes back to my training, if I'm ahead of my opponent, and I'm winning then I try to make sure that I don't lose the stupid points, I try to make sure that I'm playing defensively, and if there is an opportunity for me to attack, sure why not attack, if I can get one or two points, sure I go for it, I don't head back all the time, if I do decide to take the more defensive approach, then I make sure that I block properly and make sure that I don't lose any stupid points, if I'm behind, there is only one thing that I would think about depending how far I'm behind, if I'm behind by a lot of points, if I'm behind just one or two points then basically I try and score the one or two points, try to set up my opponent to get the points, try to do my own technique to score the points, if that's a big spread then that's the

only thing that I would think about is going for knock out, if there is a big spread within a minutes, then you go for knock out, you know you really can't score because there is only certain points that you can score in a short period of time, the only thing that you can beat your opponent is go for knock out.

(e) when the score board showed you were winning at the first round, second round, or third round?

C. I'm thinking great, everything is going according to the schedule, just stay focus exact the same way. If everyhting is going according to the schedule, I just telling myself, you are doing the good job, stick to the plan, it's working, stick to the plan.

Do you like to look at the score board? If yes, when?

C. Yes, whatever I get my point, whenever perhaps my opponent get the point, I want to know right away whether I'm behind of I'm ahead.

(f) when the score board show you were losing at the first round, second round, or third round?

C. Basicly very natural reaction is if the score board shows that I'm losing, I have the tendency to get aggressive right away, it's no need because it's still early, It's still a lot of time, any competition is three minutes three rounds, is still a lot of time left, so just a matter of one or two points, I try to frame myself from getting excited, basicly from all of a sudden very early in the game being very aggressive because when you become very aggressive you will have the tendency not to think properly, and basicly you will become very vulnerable to losing your points because you are not thinking straight, so I try to relax and just lots of time left, I still have the second or third round then we go back and fight the opponent, slow down the fight and figure out my opponent instead of going crazy and panicking, in second round if I'm losing, honestly I'll get ah....this is not working, what I have to do to make it work, once again if there is a big points spread, ok, then there is only one thing that I can think about is to go for the knock out, this is exactly what happen in my last tournament in Capman Island, you know I have a goal and I set a goal in the first round and it was rediculous, it's three nothing after the first round, I couldn't believe that I was losing three nothing because to me like there is no points score but some how after the first round the score board shows three nothing, so in the second round when I was back there, I was trying to close the gap in terms of points, so my goal is to go there and at least score two points to close the gap and not lose any points which made the score three two which mean I have three minutes to score or go ahead, when I went back there in second round, all of a suden I score a points, he score one more point so basicly four to one and I knew it's ok, four to one that's three points different, I have one round to go, or I have like a one and a half to go, it's only one thing that I could do at this time, it's three points different, I started to think that I have to go for the knock out, even though I didn't try to go for the knock out right away in the second round, eventhough that was what I was planning, so I started to look for the weaknesses in the second round that I can see well, and be able to knock him out, how am I going to knock him out, how can I do it, so I have to start moving, attacking my opponent, make him move and see how is he going to react, that's going to give me to knock him out, finally I came back and I think about it when I was in the second round, finally when I was in the third round, I try to keep that match really slow, really wlow, let him think that I don't want to attack and then slowly I go for the knock out and it didn't happen perhaps my timing was off, but I have the right idea but it just my timing was a little bit off that's basicly why I couldn't win the match, that's basicly get the knock out and win the match and perhaps my timing was

just a little bit off when I actually try to but I have the right idea and I have the right point but it just didn't come true in terms of my timing.

16. (a) What was your best ever performance?

C. I would have to sayit's been a few....I have been recently, I would have to say most recently, it was my first match at the World Cup against Germany, I fought this German guy, he was so tall, he is tall, he was very strong, he has a big advantage over me, because he is taller than me, he has longer leg but I try to use my....., in term of I'm shorter than him, I try to get the advantage over him and I beat him and I'm so proud the way I beat him, I beat him so clean like everything was there, like I say even though like what I was saying before how I felt, before I went in there I felt heavy, before I went in there I felt heavy but when I went in there I felt so prepared mentally that every time I throw a kick, I score a point, and my timing was just perfect, my timing was perfect, everything was just perfect to me, I beat him so clean, all the thing that I work on and practice, I did all the thing that I plan to do before I go to the ring, I still have the schedule every round, it's almost seem like a perfect match, everything was according to what I have plan.

What were you thinking or saying to yourself immediately before the event?

C. First of all when I saw him I said Oh my god! why I always have to fight all this big guy but right away I say no, no, no, that's negative thinking, I have to think, Ok, this guy is tall, he got long leg, Pong! he is slower than me, I'm shorter, I'm faster than him, so right away I look and say I have the advantages, of course he's thinking I'm taller than this guy, I have longer leg, that's the advantage for me, I can control because I have longer leg, I'm sure that's what he was thinking, but I'm not thinking that but I'm shorter than him, I'm faster than him, I can beat him, so that's basicly what I was thinking.

How were you focused during the event?

C. I was focus in terms of that I was following what I have planned and it was working and that kept me in focus, like you know I was thinking I want to do this and he is going to react this way and I know I can beat him, I can score points in him by reacting like that, like this afterwards or whawtever, the fact that there was a result basicly we all being points scored, that got me focus.

What were you doing or thinking between periods of action?

C. I was thinking when is this fight is going to end, it lasts us song long, it was such a long fight, like one of the longest fight because at that time, I got tired, I got tired in the third round because in the third rounds, when the third round started I was like far ahead of him, I was winning six three in points, I was ahead of him, and so he is judt coming to me, and it just make me so tired because he was chasing at me, so I got very tired, I felt OK, I'm tired I'm not going to exchange with him, if I exchange with him, I'm going to get more tired, so I just try to play a very smart defensive game, that's what I do.

What were you thinking or saying after the competition?

C. I was really happy with my performance and I say you know you did exactly what you plan, you know when you get tired you didn't exchange because people normally think that when you get tired, your opponent get aggressive and if you try to do the same, you will get too tired so basicly I knew I was tired if I exchange I,m going to be more tired and so I just play a very defensive game so after the game I was basicly say you fought well, you know everything according to the plan, you did a good job.

(b) Now think about one of your worst performances in international

competition for that same event. Which one was it?

C. Ah...My worst performance I would have to say in 1993 World Championship in New York City, that's probably my worst performance, why it was, I didn't train before the competition, I mean to me the championship is the biggest event in terms of taekwondo, and I was there three weeks before the competition, I was gone away vacation for three weeks and I would never miss it because it was my brother wedding, and my brother set to get married all the way in Europe so I was there for three weeks and even though I train there it wasn't the same you know like I say, no one to practice, to spar with, when I was there, I train like a nightmare, I jog along the beach, I did push up, sit up, I keep up my physical conditioning, but when I came back first day for my practice, and I spar, I have no stamina, I was so tired, and because I wasn't training what you actually end up doing, you know when you compete, when you go to the competition, it's full contact, if you don't do full contact sparring, no matter how many sit up, push up you do, how many stair you climb, you are going to get tired, and so in terms of everything was off, my timing was off because all the time that I didn't practice, three weeks was a long time without physical contact, so everything was really off, it was a horrible experience.

Again, what were you thinking before the event?

C. It's funny, I told myself ok, I know I didn't train hard enough so I can't expect big result, what I said to myself was try to go in there and just have fun, just going there and trying to do...usually when you focus too much on winning, you are too cautious about certain techniques you do, you limit yourself to what you can do, let's say when you spar at the club, or when you spar at the tournament, when you spar at the club, you don't care if you lose the points, so there are so many things that you shine, you are a star, but when you go to the tournament, you were thinking I can't do this in this tournament because this is competition you know, in competition you have to careful, you have to really watch every technique you do, so you kind of strange, you know you don't want to show, your true self doesn't come up like it does when you spar at the club and that's basicly I say why don't I just go in there and just let everything go, whatever comes out, whatever techniques, whatever it is just have fun, and just let everything go, so that's the target I set for myself in that competition. I lost my second match to Sweden, that guy was horrible, that's make me feel so bad, he wasn't good at all.

How were you focused during?

C. I was just tryingbecause all the while before I always say to myself, I got to win, I got to win, I got to win, I was just trying to be relax, just do what I want to do in the competition, like the jumping techniques and you know high level techniques you know etc., basicly I was just showing off but natural you think about winning, that's natural, you think about winning, you know you want to win but in a sudden you become constrain, you restrict yourself to the thing that you want to do.

What were you doing or thinking between periods of action?

C. Really, there wasn't a lot, if anything I was just trying to win, even though I knew I didn't prepare well for this tournament but winning think is still there, I just wanted to win, I just want to beat this guy, I just want to beat, I was still thinking of the thing that I needed to do to beat him, to beat this person but it was a different experience altogether even mentally I wasn't mentally strong, I was like, I am like when I train hard for the competition etc., there was a great imbalance in terms of mental preparation and my physical preparation.

What were you thinking or saying after the competition?

C. After the competition, I keep saying what a horses I had, because I kind of felt embarace because I am the men team captain and that kind of performance, I felt bad, so I felt like I let the team down, but mainly I was just disappointed, I shouldn't say I got disappointed because I knew I wasn't ready to achieve something very high that I guess like I said I felt probably anything worst because of who I lost, that's proabaly wouldn't make any differences because of who I lost.

Did you learn any lesson from this tournament?

C. Yes, before competition you got to train, that's very simple, that's no slack off, you got to train, you got to train.

(c) What were the major differences between these two performances in your preparation, thinking, feeling, or attentional focus?

C. The major differences are when you train before the competition you train well llike I say everyhting is there, there is so much confident, you know you practice hard, you know you physically prepared, you know you mentally prepared even though you have a injury, it doesn't seem to bother you because mentally you are more prepared, even though like I say you physical feel half of the injury, you may feel some how impaired you physically but just the fact that you're so prepared mentally, that would put you through. The other one like I said, you physical enough prepared, you mentally enough prepared that's make a huge different.

17. What role, if any, did your coach and/or others, such as Consultants, play in your preparation? In what way, if any, did they help or interfere?

C. My coach plays a big role, I don't really look too much to my coach for advice on my how am I going to beat my opponent, that's almost like I try to figure out of myself but to me he is there for support, just to make sure that you're doing a good job, you know may be this is not working why didn't you try this way, he is there to overseen my opponent. Once again before the competition, the coaches there for assurance, he is there to training you, ok, but it's not so much of training you but what plays an important role was the coaches reassurance seems that you're ready, heading that from your coach make a big different, when your coach tell you that you're ready and you practice hard, you know this aspect of the game is going really well, you know, he is always assure me, your time is improving, he is giving you constructive criticism, where is your weaknessess etc., and also when you're doing a good job, focus more on that etc..

How do the team members get along?

C. Team members get along very well and it depend on whose on the team, it seems and always seems that we have language problem, most of the members consists if Quebec and English Canada and it always seems to have language barrier because a lot of the Quebec people don't speak English, the rest of the team members, they don't speak France. So It's kind of language barrier but in general we get along very well, another barrier in terms of training, some of the team members are not use to the type of traininig, I'm the team captain and usually lead the training session and all that before the competition workout, a lot of them haven't had the type of training that we do, they kind of feel our of place, it kind if negative for the training, so I kind of make the training very basic so that everybody can basicly follow.

Do you think your teammates help you in your mental preparation? If yes, how and in what way. If no, did you do something about that?

C. Yes, for sure you know the encouragement, positive thinking from your teammates, that helps a lot.

18. Have you ever worked with a sport consultant/psychologist for more than one session, please answer the following: NO

(a) What brought you together with a sport consultant?

(b) How did you get started? What did the consultant do first? What did he/she ask you to do? What did you do? (Probe for details about the consultation, e.g., identifying goals, developing a contract, teaching mental skills such as relaxation, imagery, etc., frequency and duration of sessions, mental training homework assignments.)

(c) What was the consultant like as a person?

(d) If appropriate, ask how did the consultant fit in with the coach, athletes, and other staff?

(e) How effective was his work with you? (Probe for basis and criteria for this evaluation.)

19. Think back to how you felt just before your best international event. How ready did you believe you were at that moment? Select a number from the scale to represent the degree of your physical, technical and mental preparation.

	100% ready					Zero% ready					
Physical	10	<u>9</u>	8	7	6	5	4	3	2	1	0
Technical	10	9	<u>8</u>	7	6	5	4	3	2	1	0
Mental	10	<u>9</u>	8	7	6	5	4	3	2	1	0

20. What changes should be made in order to improve the readiness of Canadian athletes like you (e.g., within your own situation and within the sport system)?

C. We could be full time athletes, that would make a huge different, we had training camp facilities, like all our best athletes could just train all the time together national or internationally, then taekwondo will be taken into new heights in Canada especially the types of training that we have, we would be one of the strongest countries in the world, I mean like I say earlier, Canada finished even though most athletes in Canada is basically like a past time, you know, last year World Championship we finished third in the world, and this is like the country like Chinese Taipei for example, I don't think they even placed, this athletes practice taekwondo whole day long, there have a sample like when they get gold medal, they get paid 110,000 U.S. dollars, what do we get paid, it's nothing, we are not for the money, we are not for the glory, it's all the personal thing, it's all the personal achievement, we all for our personal achievements, if we have those type of incentives, and we had these facilities just to train and not worry about anything else, taekwondo would be taken into new heights in Canada.

21. How have things been doing since your most recent international event?

22. Do you think you are the same or a different person when you are inside

and outside the competition arena? If different, what makes you a different person and what is the difference?

C. Yes, I think I'm very different person when I'm inside and outside the competition, what's make me different? Inside the ring, I'm a lion, tiger, no, I wouldn't go to that extend, but in terms of my manner, it's very....I think I'm a no manner athlete, outside the ring, I care about the people, very polite, inside the ring, I'm just as polite you know, I show respect, you know that but in competition, ah.....I think the main differences I don't want my opponent realize how mentally strong I am until I step into the ring with me, I think a lot of my opponents think that Tino is a really nice guy, when he steps into the ring, he is a nice guy too, no, when I step into the ring, I think my mental toughness shows to people, so I think that I'm very humbie when I'm outside the ring but when I'm inside the ring, I'm very very strong mentally and I think that shows to my opponent.

23. Did you shout or yell during training and competition?

(a) If yes, why do you shout?

C. Yes, I do, very loud, why, it does wonders for one it almost like dominate your opponent, when you scream really loud and thing like that you can intimidate your opponent, you can convince judges, you know may be achieve score of points but I think above all, when you could look into opponent in the eyes and scream really loud you know, and give him that deep deep look, it tells them something, it tells them something you know, just when I practice at the club when I look at one of the junior black belt and I was sparring with them and I look at the eyes and I scream really loud and give them one of those deep look, right away I know 90% of the confident is gone you know, so plus when you're tired, when you're injured, when you scream it's almost like a get rib of the pain you know.

(b) What do you think or feel when you are shouting?

C. When I'm shouting because of pain then I don't really feel anything, once I shout, I don't feel anything anymore, sometimes I shout out of anger, sometimes I shout out of not cockyness but out of confident to show my opponent, to boost my confident, to show my opponent that I'm more confident than he is you know, and stuff like that, so basicly to show my opponent that I'm the more dominant player in the match.

24. Have you ever knocked out your opponent? If yes, what did you say to yourself when it happened?

C. Yes, I have. When it happened I said "YES!" you know at that time happened, you can't have that's feeling for you, you can't feel bad, youmay feel bad afterwards, at that time that happened, it's always a good feeling, you know like I said "Yes, I knock him out!" that's very important.

25. Which area of the body do you like to score points? Why?

C. I like to score points to the face because it's more superior, to me I don't think it's difficult to kick opponent's face like if you want to take tapes of my fights about my fights usually I will hit every single opponent to the face, it's hardly one fight that I don't hit my opponent the face, I'm usually very consistent with me kicking my opponent to the face, I guess I can go back so many national tapes, so many provincial tapes not so much internationally as internationally a little bit harder but even internationally I'm usually very consistent in kicking people to the face. I don't say kicking to face is easier than kicking to

the stomach, I have certain ability, certain reflex if it's changing, I always see my opponent, especially when I am fighting my opponent I like to exchange, I have a very snicky axe kick that come down while I'm exchanging, it's just come out from no way to my opponent's face and if you want to look at the tapes of me at the national or provincial game, look at national a lot of national, I have four fights, three of my opponents I kicked them to the face. Provincial games I have four fights, four fights I hit my opponent's face, so I'm usually very consistently provincial, national and internationally, national a bit difficult but still the majority of the points still body shot and I still think it's easy to get the body but I think I have a kind of belief that's one of my strong aspect of my fight is to be able to hit my opponent's face.

Which area of the body do you like to focus on when you are facing your opponent in the competition arena? Why?

C. I like to look at my opponent eyes and shoulder, from the shoulder up, why, basically the eyes tell when your opponent is going to move from the shoulder, a lot of people young, even when I was young fighter, I use to look at the feet because when you got to kick, the first thing is to move your feet but it's not, the first thing that move is your opponent's eyes, it's almost like you can read your opponent or your opponent shoulder that's the first thing is going to move and once again this is something that you get what is there even when I talk to my student today, where do you look, usually when they just started out, when they have very little experience, mostly look at the feet, hardly you get somebody to say that the shoulder or the eyes, this is the feet or the body, I think as you become more experience, it becomes different, you look at the shoulder and the eyes or both, I look at the both.

26. What could be done to improve the overall or mental readiness of other taekwondo athletes such as yourself?

C. The mental readiness I think is positive thinking, a lot of time people thought are negative like they have the negative thought like I'm fighting Korea now you know this and that, why Korea, I think if you think positive is better than think negative, it may not, put it this way, you don't want to get this self thought hope, you know you already been national champion and all of the sudden you go out and face the international athlete and you expected to beat them, that's give you self thought hope but still setting a positive attitude like I can keep up with this guy or you know I can survive for three rounds, I can survive for being knock out, whatever, basically looking and taking the positive and thinking the positive and not thinking about the negative, it's very easy to see our weaknesses and a lot of time you know we don't focus on our strong points.

27. (a) What would you say if someone said "combat sport is very dangerous, you can get knocked out anytime"

C. I say that is no true, when you look at the fight that our sport is full contact and you look at the number of athletes and then usually have the ratio between serious injuries is usually very small ratio, it is very very small. I mean like in our sport whether is contact or non contact, you could have always have torn knee, twisted ankle, yes, that's happen a lot but that happen in any sport, hockey, football, golf if you say it is a sport, bowling, people hurt their back, people twisted their ankle, people hurt their knee, those are part of sport, all those injury but serious injury like physical contact injury like getting knock out, stuff like that, it's ratio is very very small, recently we have a world championship, there are 800 athletes, there was one knock out, I think was two knock out out of 800 athletes, that is a very small ratio

and in term of serious injury like broken leg and stuff like that and I think there was not, there might have been fews broken arm and stuff like that but the numbers of athlete if you look at it so when you look at the international competition, an athlete, I don't think athletes at the competition, they don't go to a competition and think like I am going to kill my opponent, when they go to competition ok I have to beat my opponent and then once you start follows behind in terms of point where when you think that you could knock out your opponent then your opponent perhaps could consider going for knock out and then that you natural think of knock out, I mean as a fighter you usually thinking of knock out your opponent but I don't think that a lot of opponent going to the ring and thinking about I'm going to knock him out, I'm going to knock him out, if you go to the ring and thinking ok, I'm going to beat this person in points but then if he try for knock out then natural instint would meet you to the knock out.

(b) What would you say or think if someone asked "Are you ready to fight?" when you are doing your warm up before the games?

C. I don't like people ask me "Are you ready?" because I know why you put that, it's true people put that though, well if I wasn't ready, I wouldn't be here you know, all those kind of training you should be ready even though you are not, I don't think this is the proper time to ask "Are you ready?", some sort of putting doubt in your mine, it's almost like a mental thing, mental obstacles, so I don't think it's very healthy as a coach or fan to go up and say "Are you ready for the fight?" instead of saying you are ready and let's go out there.

28. When do you plan to retire? Why?

C. I don't know, may be after 2000 Olympics, actually I tend to take a couple years off, one or two years off and then come back again, I got to come back couples of years before so that I can basicly compete again, compete again and ready for the year 2000 but now I try to take off a year or two off actually after the Pan-Am Games, take a year or two off and then start again, after winning gold medal at the Pan-Am Games.

29. What is the most difficult part of being an outstanding athlete?

C. The most difficult part is being the champion I think, when you are a champion, when you are working way out to be a champion, you know you do anything, you train so hard because you want to beat the champion, you know so it's like one personal best, so many people want to get up there but when you are a champion, you know when you are at the top, every body is trying to beat you, there are somany people are trying to beat you, I think it's very difficult because people always training hard, they know you practice hard so they are going to try and because you are the champion, they are going to practice three times harder than you, then you have to put more times, they bet to put more times to train because they know you are the champion, they are going to train a lot more to beat you.

What is the most challenging part of being an outstanding athlete?

C. The most challenging I think is staying injuries free no matter how you look at it, no matter how good athlete you are, if you are continuously injured, you will never able to perform at your best, so something is very challenging is being very smart about your way training so that you prevent injury from happening. The reason why I'm saying that because I'm being fortunate, I have been doing this for twelve years and I hardly have serious injury and I think that's help me b ecause I know a lot of people that have had serioius injury and it doesn't go away, it's constantly naging at them, it's constanly bothering them, it affects their

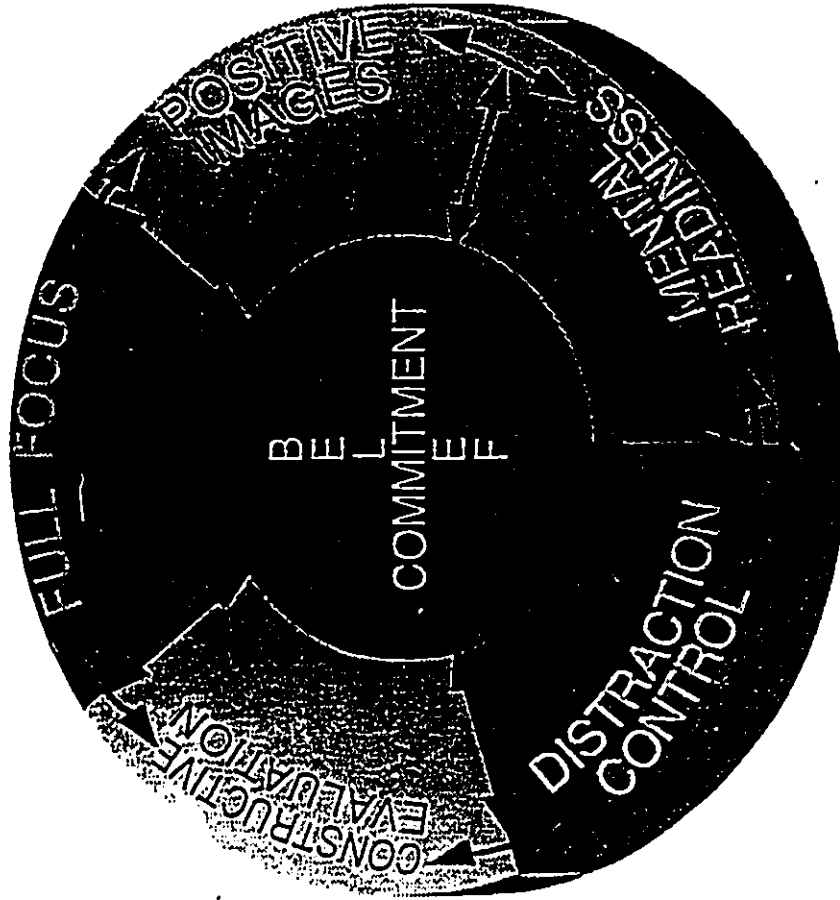
training, and to have a feeling of pain is not a very good feeling and I think something is very challenging is to stay injury free but at least from serious injury, now may be the most challenging I guess is staying at the top I guess as well, I mean that's take a lot of challenge, you really have to work hard to get into the top, it takes a lot to become an outstanding athlete but it's going to take a lot more to be at the top, to stay there.

30. Is there anything else you would like to talk about?

C. Not really, taekwondo have done so many good things for me and so many good things for people, I don't think it's a violent sport, people always think that it's a violent sport because they didn't understand taekwondo, I think it's a very very good sport, it's a very very big challenge you know you never know how strong you are in terms of mentally, put it this way, anybody that can dedicate themselves so many years to one particular not just taekwondo, it can be hockey or whatever, it can be studying in school, whatever you dedicated in so much in certain activities, certain sport, certain job or whatever, you know, I think it becomes much easier in life to accomplished certain goals, set goals for yourselves and accomplish those goals because you have endurance so much, you push yourself so much that what seems to people such a big thing, for you is like really nothing, is like there is a goal when you achieve.

APPENDIX G

WHEEL OF HUMAN EXCELLENCE



APPENDIX H

The Wheel of Excellence (Orlick, 1995) - Numbers of Participants Who Mentioned Each of the Subcomponents.

<u>Skill & Sub-Components:</u>	<u>Subjects:</u>	<u>Skill and Sub-Components:</u>	<u>Subjects:</u>
1. <u>Commitment:</u>		4. <u>Positive Images:</u>	
Commitment to Excel	7	To Feel Flawless Execution	4
Pursues Daily Goals	5	To Create Positive Feelings	8
Does Everything to Excel	7	To Enhance Confidence	8
Makes Contribution to Team	5	To Perform to Capacity	4
Allows Time for Regeneration	6	To Imagine Being in Control	4
Plays for Meaningful Reason	4	To Recall/Refine Technical Skills	3
Taekwondo is Focal Point of Life	7	To Create/Sharpen Focus	4
Committed to Self-Acceptance	7	To Regain Self-Control	5
Develops Mental Links	4		
Total	52	Total	40
2. <u>Belief:</u>		5. <u>Mental Readiness:</u>	
Belief in Meaningfulness of Pursuit	7	Uses Learning Opportunities	5
Believes Goal Attainment Possible	6	Develops Required Skills	5
Belief in Teammates/Coach	6	Uses a Training Plan	3
Others Believe in You	6	Uses a Pregame Plan	4
Thinking You Can do it.	7	Uses a Game Focus Plan	5
Acting Like You Can Do it	6	Relaxes Away From Team	5
Believing You Can Do It.	9	Be Smart in Training	5
Knowing That You Can Do It	6	Be Smart in Competition	9
Total	53	Total	41
3. <u>Full Focus:</u>		6. <u>Distraction Control:</u>	
Plays(ed) in the "Zone"	3	Maintains Focus	7
Trusts Mind & Body to Perform	8	Regains Focus If Distracted	5
Takes Mental Breaks	5	Knows What Can Control	5
Attends to Relevant Cues	7	Identifies Distractors	3
Total	23	Total	20
		7. <u>Constructive Evaluation</u>	
		Analyzes What Went Well	3
		Knows What to Refine	5
		Draws Lessons From Performance	6
		Acts Upon Lesson Learned	7
		Assesses Role of Mental Approach	4
		Learns(ed) From Previous Experience	6
		Total	31