# Canadian PGA Master Professional Research Paper Executive Summary

The Development of Expertise for Elite Competitive Golfers and the Related Probability of Advancing to the PGA Tour – Key Information for Athletes, Parents, Coaches, Golf Professionals and Administrators

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#### **Testimonials**

"Henry Brunton has produced a timely and relevant paper that addresses one of the most pressing issues in sport today: How can we help children excel in sport while keeping the experience enjoyable and fulfilling? Brunton provides concrete suggestions that everyone interested in developing elite or recreational golfers should know."

Jean Côté, Ph.D.
Professor and Director
School of Kinesiology and Health Studies
Queen's University

"Henry Brunton's paper is a must read for anyone interested or involved in the development of elite competitive golfers. Based on research evidence, he critically examines how expertise is developed, beginning with young golfers and ending with those who eventually make it on the PGA Tour. He clearly identifies the beneficial and harmful effects associated with how expertise is currently developed and concludes with sound recommendations for improving the current situation. Indeed, Henry's paper heightens our awareness of some serious problems associated with our current practices and then points us in the right direction where appropriate solutions can be found."

Bob Christina, Ph. D. Dean Emeritus School of Health and Human Performance University of North Carolina at Greensboro

"As a statistician, I was fascinated by the number of competitive golfers and the subsequent number of players that made it to the PGA Tour. This is a useful guide for helping young players understand the dedication required to become a world-class athlete and the importance of balancing a commitment to golf with alternative career paths. Henry's template on the stages of sport development and the roles of parents, coaches and peers should be required reading for all individuals who influence developing athletes. Henry has incorporated a thorough analysis of available data into a practical framework for assisting in the development of elite athletes".

John C. Marshall, Ph.D. President Self Management Group

## **Objective**

This paper provides aspiring competitive golfers and all those who support their pursuits with a clearer understanding of the stages for developing expertise. This paper includes information about the changing patterns of behavior and the optimal environment for facilitating sports skills development and the necessary motivation at each stage. This paper also documents the time and effort required to reach the upper echelons of performance and the related probability of advancing to the PGA Tour.

#### **General Overview**

In this paper, research is presented showing that the sport of golf is considered a 20 year developmental sport in that it takes about 20 years from the time an individual has a first exposure to the sport until he or she is likely to have the opportunity to win a major professional championship.

The odds for making it to the PGA Tour are chronicled in this paper which shows that there are no guarantees to make it to the PGA Tour even if they have outstanding results in junior, collegiate and amateur golf. The research shows that the odds are remarkably stacked against anyone who aspires to become a member of the PGA Tour. The reality is that precious few of the most outstanding and high achieving high school, AJGA, and NCAA golfers will ever reach this level of performance. On average an NCAA Division I Golf Program will produce a PGA Tour Player about once every 24 years.

If making to the PGA Tour is such a remote possibility for anyone, then why play the sport? The benefits of participating in competitive golf were outlined in detail. The sport of golf and the pursuit of excellence provide participants with tremendous opportunities for enjoyment, challenge, and personal development. The skills which golf teaches and demands often transfer into other areas of life.

Research from Dr. Jean Cote and his colleagues was drawn upon in detail showing the stages of development of expertise, the changing patterns of behavior and environment necessary to facilitate optimal sports skills development. This information applied to the sport of golf can be very beneficial to parents, coaches, and golf administrators. Adopting ideas presented in this paper may lead to a more positive experience for participants in the game and lead to long term growth of the sport.

This paper is not intended to shatter dreams or hope for any golfer interested in making it to the major leagues of golf. Instead, it is intended to inspire aspiring elite level golfers by providing them with scientific information so that they formulate a sound strategy that leads to their long-term development in the sport.

# **Summary of Key Points in this paper**

#### Golf is a 20 year developmental sport

The developmental path for high performance golf is lengthy. In research conducted by Sport England, it was determined that golf is about a 20 year development sport in that it takes that long for men and women to reach the level of major professional event champions from the time they begin the sport. This study discovered that the average age major champions begin the game is 8.28 years for boys and 9.1 years for girls. It takes approximately 20 years from the time that these athletes begin their experience in golf to reach the point where they are in position to win major professional championships.

#### 10 Years/10,000 hours of deliberate practice are required

In addition to the time that it takes for aspiring elite level male competitive golfers to develop to the world class professional level, Dr. Anders Ericsson's work was highlighted illustrating that it takes a tremendous amount of focused effort - 10 years minimum and about 10,000 hours of deliberate practice in order to develop the skills and expertise necessary to become a bona fide world class potential professional competitor.

To reach this threshold many experts engage in deliberate practice for about 4-5 hours per day. As the hours increase, finding the appropriate balance between strain and rest is one of the major challenges for individuals pursuing the limits of their performance.

## Probability of reaching the PGA Tour

The research shows that the odds are remarkably stacked against anyone who aspires to become a member of the PGA Tour. The reality is that precious few of the most outstanding and high achieving high school, AJGA, and NCAA golfers will ever reach this level of performance.

- Canadian junior golf The odds of a Canadian male junior competitive golfer making it to the PGA Tour About 1 in 10,200
- The odds of a U.S. high school player making it to the PGA Tour About 1 in 5,104
- The American Junior Golf Association (AJGA) The odds of an AJGA player making it to the PGA Tour About 1 in 101
- AJGA All-Americans- The odds of an AJGA All-American making it to the PGA Tour About 1 in 6
- U.S. College Golfers- DI, DIII, NAIA, and NJCAA The odds of a U.S. college golfer-DI, DIII, NAIA, and NJCAA player making it to the PGA Tour - About 1 in 386
- NCAA Division I Players The odds of an NCAA Division I player making it to the PGA Tour
   About 1 in 100

These numbers beg the question, if making it to the PGA Tour is such a remote possibility for anyone, then why play the sport? The sport of golf and the pursuit of excellence provide participants with tremendous opportunities for enjoyment, challenge and personal development. The skills that golf teaches and demands often transfer into other areas of life and will help participants grow into well-rounded adults even if the junior golfer does not reach his or her ultimate competitive goals.

#### Benefits of competition

There are many benefits to participating in competitive golf. Studies have clearly shown that being involved in sport and physical activity provides youth with opportunities to experience challenge, fun and enjoyment, while increasing self-esteem and decreasing stress.

### Research supports the following as positive benefits from sport participation: Social development

Sport experiences foster citizenship, social success, positive peer relationships and leadership skills.

#### Adult career development

Youth sport and physical activity participation has been positively correlated with adult career achievement and negatively correlated with school dropout and delinquent behavior.

#### Social skills development

Sport provides an arena for the development of social skills such as cooperation, assertion, responsibility, empathy and self-control.

#### Discipline and commitment

Youth involved in sport often demonstrate discipline and commitment. Preliminary evidence suggests that these traits carry over into other domains of life such as school and community.

#### Intellectual development

Youths' involvement in physical activity has been positively correlated with academic performance in numerous studies. Participation in high school sport has been positively linked to school grades, school attendance, choice for demanding courses, time spent on homework, educational aspirations during and after high school and college attendance.

#### Emotional development

Participation in structured extracurricular activities was associated with higher life satisfaction among youth, and that the more structured activities youth participated in, the higher their life satisfaction.

#### Normal growth and development

Physical activity is essential for youths' optimal development, as it facilitates normal growth and development in children and adolescents.

#### Smoking

Adolescents involved in regular physical activity are less likely to smoke.

#### Diseases

Active youth are less likely to develop numerous diseases later in life including heart disease, obesity, diabetes, osteoporosis, stroke, depression and cancer.

# Stages of sport development: Sampling Years, Specializing Years and Investment Years

In studies concerning elite athlete development, clear patterns of development have been identified. There are three stages of sport development from childhood to late adolescence; the *Sampling Years* (ages 6-12), the *Specializing Years* (ages 13-15) and the *Investment Years* (age 16+). The Sampling, Specializing and Investment years are differentiated by and based on the amount of the participant's deliberate practice (structured formal training and organized competition) and deliberate play (neighborhood play using the general rules of the game without being an organized league)- i.e. pick-up basketball or street hockey.

#### How many sports should a child play in the sampling years?

In this stage youngsters are given the opportunity to sample an array of sports and activities. The goal is for them to experience fun and excitement through participating in sport. Children in this stage are generally participating in 3-6 sports/activities. In this stage, research suggests that participants should ideally develop the "ABC's" of physical literacy – the fundamental motor skills, such as running, jumping and throwing. These fundamental skills can be transferred to any sports or activities of interest in the future.

#### Specializing Years: What does the research suggest?

The research suggests that if a child is passionate about golf and has the desire and aptitude to potentially advance as an elite level player in the sport, then at about age 13, he should make golf one of his "top two" sports. He should align himself with a professional

coach who is trained and specializes in developing competitive players. He should develop peer group relationships with other athletes who have the same interests. He should practice, play and compete in the same fashion as other top aspiring high performance athletes in all sports. Elite golfers should follow periodized annual plans and be aware of and respect the recommended practice-to-competition ratios.

#### Investment Years: What does the research suggest?

If an athlete is committed to developing his skills as an elite level golfer, he should make golf his primary sport by age 16. He should train and compete in a professional fashion under the guidance of a highly trained golf coach who specializes in player development. He should be enrolled in an Olympic-type coaching, training and development program with other like-minded athletes. He should invest the vast majority of his free time to developing his skills as an aspiring elite level golfer and the amount of deliberate practice should increase to 3-5 hours per day.

#### Taking Action - What Does the Research Suggest?

Golf leaders at all levels and supporting stakeholders directly involved with the development of junior golfers including parents, Canadian PGA Professionals/coaches, event officials and sports administrators are challenged to be apprised of the information presented in this paper and act in the following ways to advance the sport while considering the best interests of the participants.

- Educate all stakeholders involved in junior golf and especially parents about the potential negative consequences of Early Specialization. This growing trend is dangerous. It can be very harmful to the children and families involved as well as the long-term growth and health of the sport.
- Stop junior golf promoters and golf administrators from organizing and executing high profile, high-pressure golf tournaments and tours for children under the age of 13. The research clearly shows that these events are unhealthy for the children and the sport. Furthermore, these activities in many cases lead to burnout and drop out for some individuals who may have otherwise enjoyed the sport throughout their lives.
- Create and implement a mandatory educational program for individuals involved directly and indirectly with junior golf such as Canadian PGA Professionals/coaches, event officials, sports administrators, club level junior chair people and volunteer board members.

This program needs to disseminate the research information on: the key principles of long-term athlete development applied to golf; the stages of development; the evolving roles of the coaches, parents, and peers; the 10 Year/10,000 Hour Rule; and, the importance of embracing and providing excellent programming and services to youngsters who may not be interested or suited to competitive golf. Everyone involved needs to be on "the same page" in order to seize the potential opportunities. Otherwise unwanted outcomes will occur.

- For the Canadian PGA to continue to take a leadership role by providing member professionals who are involved or interested in junior golf with comprehensive training and resources so that they may better serve golfers, their families and the game.
- Golf administrators and junior golf promoters are encouraged to change their paradigms and their ways as it relates to junior golf organization by creating

programs and competitions that are specifically designed for children in the Sampling Years, Specializing Years and Investment Years.

These people are challenged to create new "leagues" and a new "system" within junior golf that reflects the stages of development, the principles of long-term athlete development, and the role and importance of coaching. The information presented in this paper clearly shows that youngsters in various stages of development have unique wants and needs. Having 12-year-olds competing and interacting with 18-year-olds directly and indirectly at competition sites flies in the face of research and is not the best possibility for the participants or the sport.

• Develop a detailed industry-wide strategy to better identify and serve youngsters who may not desire to compete in the high performance stream of competitive golf but who are attracted to the game and predisposed to participate in it for fun. Effectively serving the masses who reside in this category by investing in programming and services and showing interest in their development and enjoyment with the sport is likely to have a long-term positive affect on all facets of the golf industry. This is the group that in the future can support and grow the game with their collective purchasing power and interest in the sport. These are the individuals who are likely to purchase green fees, club memberships, equipment, clothing, lessons and golf vacations as adults.

At present, this group is all but ignored or ill-served at best. In Canada at this time, a disproportionate amount of money, resources and expertise is being spent on the relative few who are interested in high performance competition.

• Aspiring high performance golfers along with their families and coaches need to be educated and counseled on the importance and ramifications of post-secondary school education choices and training. The research in this paper shows that it is an unlikely possibility for a player to make it to the big leagues of professional golf. Therefore, virtually all of the athletes in this category will likely be involved in careers outside of the PGA or LPGA Tour at some point in the future. These people need to be encouraged to follow their dreams in respect to exploring their limits as competitive golfers and be given every opportunity to succeed if this is their desire; however, they should do so with a cautious optimism and realism.

Currently, there is an alarming and disturbing trend in the Canadian golf culture whereby each year scores of outstanding young people who are passionate about competitive golf and who dream of playing on tour in the future compromise their post-secondary school choices, focus, and training to go for it as aspiring professional golfers. This proves to be very costly to many over time.

Too often these individuals have unwittingly mortgaged their futures on a possibility that was romantic and exciting. These individuals should be made aware of the harsh realities of advancing to the PGA or LPGA Tour and encouraged to make their own best choices regarding their futures both on and off the course.

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