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POSTDOCTORAL STUDIES

John Coleman

AUTEUR DE LA THÈSE / AUTHOR OF THESIS

M.A. (Human Kinetics)

GRADE / DEGREE

School of Human Kinetics

FACULTÉ, ÉCOLE, DÉPARTEMENT / FACULTY, SCHOOL, DEPARTMENT

Success Elements of Elite Big-Mountain Freeskiers

TITRE DE LA THÈSE / TITLE OF THESIS

T. Orlick

DIRECTEUR (DIRECTRICE) DE LA THÈSE / THESIS SUPERVISOR

CO-DIRECTEUR (CO-DIRECTRICE) DE LA THÈSE / THESIS CO-SUPERVISOR

EXAMINATEURS (EXAMINATRICES) DE LA THÈSE / THESIS EXAMINERS

N. Durand-Bush

P. Trudel

Gary W. Slater

LE DOYEN DE LA FACULTÉ DES ÉTUDES SUPÉRIEURES ET POSTDOCTORALES /  
DEAN OF THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

SUCCESS ELEMENTS OF ELITE BIG-MOUNTAIN FREESKIERS

by

John Coleman

B.Sc., University of Ottawa, 2003

THESIS

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## Abstract

The purpose of this study was to gain an understanding of the success elements of elite big mountain (BM) freeskiers to perform their best while immersed in their challenging sport. Big Mountain freeskiing is a high risk alternative sport that takes place in an unpredictable mountain environment. Nine of the best BM freeskiers in the world participated in the study, seven men, and two women. A qualitative research design was used with a post-positivist paradigm. Face-to-face interviews were used to gather the data. The success elements that emerged from the interviews were categorized within three temporal categories; pre-performance preparation (line selection, visualization, and calmness), performance execution (confidence and focus), and post-performance evaluation (reflection, lessons learned, mindset). Two additional success elements were evident for all athletes interviewed; love for their sport and what they were doing, and a fully focused connection to that in which they were engaged. These latter two success elements were not confined by temporal boundaries and were presented separately due to their uniqueness and importance. These athletes carried an intensely focused connection to what they were doing, and had the ability to remain calm while facing challenging situations. The ability of these athletes to transfer certain success elements they employed in BM freeskiing to the rest of their lives was interesting and one that warrants further research.

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## Chapter I: Introduction

*Where rational society imposes so many constraints that all activity appears to be pre-determined... edgework activities (pushing the edge) require the participant to make life-or-death decisions whilst under conditions of extreme stress....Thus the opportunity to 'maintain control of a situation that verges on total chaos' is the desired goal of participants in edgework [italics added]. (Lyng, 1990, p. 871)*

Imagine a helicopter has just dropped you off on a mountain peak. You crouch down on a ledge of snow to protect yourself from the blades of the helicopter, and feel the sting of the swirling snow given life by the powerful machine. Behind you, the mountain drops straight down two thousand feet into the cold waters of Norway. In front of you, the snow falls away steeply down a chute over three thousand feet in length. You have never been here, and the only information you have about this area is from a Polaroid photo of the mountain, and the visual information you gathered from the helicopter ride as it climbed to the peak to drop you off. As you begin putting on your skis, you remember that a fall here would mean almost certain death. Your heart starts racing, and you start breathing faster and harder.

What drives people to put themselves in this position? What are they thinking about or focusing on just before they start down the mountain? What success elements allow them to perform optimally in this dangerous environment?

No previous studies have been conducted on the success elements employed by elite athletes engaged in the high speed and high risk sport of big mountain (BM) freeskiing. Thus the purpose of this study was to gain an understanding of the success elements employed by elite BM freeskiers to perform their best while immersed in the

sport of BM freeskiing. One of the goals of this study was to begin to fill a gap in the sport psychology literature created by the lack of research on “extreme” or alternative sports with respect to the success elements required to not only survive the extreme environments in which these sports take place, but to excel in them. From a practical perspective, the findings of this study could potentially help other BM freeskiing athletes aspiring to excel in this sport.

For the purpose of this study, the term success elements served as an umbrella to explore anything that the athletes said contributed to their successful performances. This included their overall preparation, as well as other factors such as focus, confidence, commitment, use of mental imagery, distraction control and whatever else they chose to discuss related to their performance excellence.

Fayfield (2004), the founder and publisher of Freeskier magazine, reported that the increased popularity of freeskiing has in the past year accelerated like never before. This acceleration in interest is supported by the increased coverage given to this sport by some of the largest media outlets in the world (The New York Times, CBC, ESPN, and Sports Illustrated) and by showcasing it in their respective mediums. There are three main components of freeskiing: park, skiercross, and big mountain. Park freeskiing involves aerial manoeuvres off of man made jumps, rails and half-pipes. Creativity and style is what distinguishes this genre of freeskiing. Skiercross freeskiing involves racing down steep runs littered with man made banks, rollers, and jumps. The premise of this component of freeskiing is to use aggressive skiing to be the fastest individual down the course. This study explored the success elements of those participating in the third element of freeskiing, big mountain. BM freeskiing encompasses some components of

the other two elements of freeskiing (park and skiercross); namely creativity, high speed, and big aerial manoeuvres. One of the unique differences of BM freeskiing, compared to the other components of freeskiing, and traditional ski racing (alpine racing, moguls, and aerials) is the freedom each athlete has to create within an extremely difficult and unpredictable environment. BM freeskiing takes place in alpine regions of big mountains, where the terrain for a “normal” run is exposed due to the steepness of the slope, scattered with trees, and littered with cliffs.

Within the sport of BM freeskiing there are four basic forms of participation; recreation, photo shoots, filming, and competition. The athletes who compete in BM freeskiing use personal style and creativity to ski on the dangerous terrain. There are no gates and time is not the deciding factor of winning and losing as with traditional alpine ski racing. The athletes are not restricted to particular features that they must use during their run. For instance, if one athlete jumps off a particular cliff, this does not mean that other participants have to jump off the same cliff. In competition, there is a designated area for the event to take place; one that will be challenging enough for the athletes and one that the judges can see with binoculars. There are five judges who score the athletes' lines according to: the line they choose (degree of difficulty), aggressiveness, technique, fluidity, and control. Each category is rated out of ten marks for a potential total of fifty marks for each run.

My personal experience with sport psychology and BM freeskiing has motivated me to conduct this study. I have been competing in BM freeskiing events for three years. I signed up for my first event with the intention of simply trying to qualify. I skied well and ended up placing first in the event, winning the first annual International Freeskiing

Association (IFSA) event at Jay Peak. I attribute my success at that event to the physical skills I have developed over many years of skiing, combined with the mindset that I developed through years of studying mental training with the guidance of Dr. Orlick. By winning an IFSA event, I had the opportunity to compete in the North-American Freeskiing championships in Colorado the following season. My experience at this event was an amazing learning opportunity. I acquired a great deal of information about the freeskiing community by living in it for a period of time, as well as honing my mental skills for performance. Not only did I compete against some of the best skiers in the world, but I also got to know them on a personal level; what they ate, the music they enjoyed, their families, their habits, their lifestyle. One domain we did not talk about was their mental approach to freeskiing. I know that mental training is a big element for me in terms of being successful in skiing. I do not know, however, what the success elements are for the elite BF freeskiers in this field.

Martens (1987) mentioned the primary mission of a sport psychologist is “to help people enjoy sports more and to perform better when participating in sports, as well as to design the sport experience so that people come closer to reaching their potential through optimal personal development” (p. 52). Understanding the success elements that lead to optimal performances in BM freeskiing may provide those involved in the sport as well as other performers, knowledge that will help them enjoy their experiences, cope effectively with fear, and perform their best when facing big challenges.

## Chapter II: Review of Literature

An in-depth review of the literature revealed some valuable information pertaining to this study, however, very little was found that specifically dealt with the success elements that athletes use in alternative sports such as freeskiing. This section was divided into three sub-sections to provide the reader with a holistic understanding of the literature review conducted. The sections include literature regarding (a) success elements of elite performers, (b) the psychology of skiing, (c) alternative sports that involve risk.

### *Success Elements of Elite Athletes*

The effectiveness of applied sport psychology, specifically mental training techniques of elite athletes has been explored in detail over a number of years (Jackson, Dover, & Mayocchi, 1998; Mahoney, Gabriel, & Perkins, 1987; Orlick and Partington, 1988; Ungerleider & Golding, 1991). Elite performers from many disciplines, including sport (Orlick & Partington, 1988), medicine (Tribble & Newburg, 1998) space travel (Orlick & Hadfield, 1999), and the arts (Fageus, 1999; Talbot-Honeck & Orlick, 1998) have been studied to assess what elements free these exceptional people to perform at their best. The following section presents an overview of relevant sport psychology literature related to the success elements of elite performers in the world of sport.

Most studies on the psychological or mental skills of elite athletes have been conducted with “mainstream” sports. Extensive studies have been conducted on athletes performing in both summer and winter Olympic Games (Orlick & Partington, 1988), the NHL (Barbour & Orlick, 1999), and many other mainstream sports.

The majority of the applied researchers conducting these studies used semi-structured face-to-face interviews to gather relevant information. Orlick and Partington (1988) stated their reasons for using interviews were threefold; interviews provided enough openness to probe and explore new topics, they allowed the researcher to learn and understand the terms athletes used within their culture to explain mental preparation, and the flexibility of scheduling interviews at the athletes' convenience led to an increased likelihood of participation in the study. Orlick and Partington put this interviewing methodology to the test in their landmark study of mental training strategies of Olympic athletes entitled "Mental Links to Excellence". Their methods proved to be quite valuable for gaining an in-depth understanding of what athletes felt were key components of their success. The results of this study on success elements of elite athletes are widely cited in the literature (Csikszentmihalyi 1990; Csikszentmihalyi & Jackson, 1999; Jackson, et al., 1998; Mahoney, et al., 1987).

Many different terms have been used by different researchers to describe mental elements of excellence. For instance, titles such as optimal experience, playing in the zone, feeling on a high, flow, and focused connection (Csikszentmihalyi & Jackson, 1999) have been used to describe an experience in which individuals are totally engaged in what they are doing. While exploring the success elements of elite performers, certain components have surfaced consistently, regardless of the specific title given by researchers. They include clear goals both long and short-term (Burton, 1993; Orlick and Partington, 1988), simulation training, mental strength/readiness (Orlick & Partington, 1988), confidence (Orlick, 1992; Vealey, 1986), focus (Csikszentmihalyi & Jackson, 1999; Orlick & Partington, 1988), commitment (Ericsson, Krampe, & Tesch-Römer,

1993; Orlick, 1992; Scanlan, Stein, & Ravizza, 1989), preparation (Burke & Orlick, 2003; Kabush & Orlick, 2000; Orlick & Partington, 1988), and mental imagery (Orlick & Partington, 1988; Rodgers, Hall, & Buckolz, 1991). These strategies have thus far, proven to be key success elements for elite performers.

Orlick (2000) has interviewed and worked with thousands of performers from all walks of life to help them excel in their performance and their life. His research framework has been used by many researchers in sport and performance psychology. As a by-product of many research studies conducted by Orlick and his graduate students over the course of his career, Orlick (2000) wrote a book entitled *In Pursuit of Excellence* describing in detail what he has learned to be the “keys elements to success”. In the first section of this book, Orlick presents his most recent version of his Wheel of Excellence. Four elements form the outer circle of the wheel (positive images, mental readiness, distraction control and ongoing learning), and three element form the inner core of the wheel (commitment, focused connection, and confidence). The Wheel of Excellence is a model that he created and presented in an attempt to “provide the mental keys that empower you to excel and free you to become the person and performer you really want to be” (p. 3).

Csikszentmihalyi (1990) was another key researcher who dedicated much of his working life to exploring elements that were deemed to be crucial for success. He too, interviewed many elite athletes and in the mid-seventies he developed the concept of flow from the results he discovered. As defined by Csikszentmihalyi, flow is “...about focus. More than just focus, however, flow is a harmonious experience where mind and body are working together effortlessly, leaving the person feeling that something special

has just occurred. So flow is also about enjoyment” (Csikszentmihalyi & Jackson, 1999, p. 5). Flow is an important concept for this study because according to Csikszentmihalyi and Jackson, to experience a state of flow, one must use some of the success elements that have already been discussed in this paper, namely concentration on the task at hand (or a focused connection) to enter a state that allows the participant to be successful.

There are, however, specific elements involved in a state of flow that should be mentioned. The first is the challenge-skill balance. Csikszentmihalyi (1990) states that for flow to occur the activity must be challenging enough to test the participant but his perception of skills must be high enough to believe that he can be successful in the activity. If either the challenge or the perception of skills is either too high, or too low, the individual will not enter a state of flow, and will be in risk of experiencing *anxiety* or *boredom*.

Csikszentmihalyi and Jackson (1999) state that the loss of self-consciousness and the transformation of time are two very important and very unique components of the state of an individual experiencing flow. Athletes have reported that when they lose self-consciousness of what they are doing, their movements become easy and they feel a sense of oneness with their activity. In terms of the transformation of time, long events seem to pass very quickly and during very short events, participants claim to experience the moment in slow motion. These characteristics are important to note as they have been observed to occur when the performance state of participants allow them to direct their energy to their performance.

The next most closely related groups to BM freeskiers on which any substantial research has been conducted is elite professional mountain bike racers and successful

Everest Climbers. A recent study examined the mental strategies used by elite Mount Everest climbers to successfully reach the summit of the world's highest mountain (Burke & Orlick, 2003). Mountaineering at this level is similar to BM freeskiing in that the consequences of error are severe. Although the severity of the risk is similar between the two sports, the nature of the activity is quite different. Mountaineering is a high-risk activity that is quite slow, whereas BM freeskiing is high-risk and high speed. Burke and Orlick stated that each athlete spoke about the severe risk of the activity, and that by preparing ahead of time with appropriate strategies such as; physical training, detailed planning, imagery, mental strength, focusing, self-confidence, team support, and short-term goal-setting, they were able to overcome the obstacles they faced while on the mountain.

Kabush and Orlick (1999) explored the importance of focus for elite mountain bike racers. All athletes commented that focus was extremely important and most felt that the most important aspect about focus is to know what you want to focus on, and then remain focussed on that task as intensely as possible. Proper preparation both physically and creating race plans were mentioned as aids in knowing on what the athletes wanted to be focused. Distraction control, refocusing plans, preparation, positive thoughts, and positive imagery were mentioned as being helpful when trying to refocus when they were distracted from their intended focus. The similarities between mountain biking and BM freeskiing are the speed with which both activities are performed, and both have a high level of risk inherent to the activities. For the most part, the amount of risk involved in mountain biking is less than that of BM freeskiing in that there are no avalanches in mountain biking, and the amount of exposure that the athletes face is not as severe.

*The Psychology of Skiing*

In a review of both scientific journals, and books, no literature dealing with success elements and BM freeskiing was found. There were, however, some studies found that related to psychology and skiing. Racdeke and Stein (1994) examined the relationship between felt arousal (perceived arousal levels, not actual physical arousal level), thoughts/ feelings, and ski performance, based on conceptualizations of arousal and affect. In this study, recreational slalom skiers were asked to complete a self-report measure prior to several ski runs to record the felt arousal and thoughts/feelings the skiers were experiencing prior to their runs. Results showed that subjective conceptions of ski performance (whether positive or negative) had a direct relationship with felt arousal, thoughts/ feelings, and performance of the athletes. Athletes who showed moderately high levels of arousal combined with moderate positive thoughts/feelings performed better than those with low arousal levels and/or negative thoughts/feelings. It was interesting to note that “contrary to the inverted-U hypothesis, felt arousal is not associated with poor performance ratings if it is accompanied by positive thoughts/ feelings” (p. 360). A 30 second structured ski course was used to conduct the study. This performance environment differs immensely from the one elite BM freeskiers face, and the performance level of the participants differs from the world class athletes interviewed for this study, making it difficult to draw parallels from this study to the BM freeskiing domain.

White (1993) explored the relationship between mental skills measured with the Psychological Skills Inventory for Sport (PSIS; Mahoney, 1988), experience, practice commitment, and gender of collegiate skiers. The dependent variables were; anxiety,

concentration, confidence, mental preparation, motivation, and team emphasis, while the independent variables were; experience, practice, commitment, and gender. The authors stated that “high level/elite performers” participated in this study and elite was defined as skiers who at some time competed in the NCAA ski (racing) championships, in contrast to our definition of elite performers as high level world class performers. Internal reliability for the six sub-scales of the PSIS for all subjects was found to be acceptable when employed in the context of elite collegiate skiing. No significant difference was discovered on the PSIS subscales with regards to the number of years of experience, or the number of hours practiced daily, thus they concluded that: “These findings suggest that to reach an elite level of skiing proficiency all skiers need to have knowledge about certain psychological skills” (p. 56). Perhaps they would have found significant differences with the years of experience and number of hours practiced if the participants were the best in the world. Findings suggest assessment can be completed, and they provide more than descriptive data on the type of psychological skills used by elite athletes.

Duda and White (1992) conducted a study entitled Goal Orientation and Beliefs about the Causes of Sport Success among “Elite” Skiers. The purpose of this study was to test the Task and Ego Orientation in Sport Questionnaire (TEOSQ) in high level competitive sport, by exploring the relationship between set goals and the belief of what are success elements among elite athletes. Similar to the previous study mentioned, the participants for this study had competed in the NCAA Ski championships at some time, either in alpine or Nordic style skiing. Each athlete completed a 13 item questionnaire with regards to task/ego orientations based on their perceived best performance. They

were then asked to respond to a 21 item questionnaire reflecting on perceived causes of success in skiing. The question asked was, “What do you think is most likely to help athletes do well or succeed in competitive skiing” (p. 337)? A 5 point Likert-type scale was used to assess the responses. Stated results from this study included the following; from a task perspective, skiing success is a result of hard work, superior ability, and selecting activities that one can perform successfully: “This finding is a major difference as compared to past work on students and non-athletes” (p. 340). From an ego perspective, skiing success came from taking an illegal advantage (blood doping, consumption of performance enhancing drugs, breaking the rules), possessing high ability, selecting tasks that one can accomplish, and external variables (how to impress the coach, lucky breaks, right equipment, pretend to like the coach). Most of the external variables are not relevant for BM freeskiers because they do not have coaches. The authors suggested that an individual with an ego perspective might have motivational problems because many of the elements they claim to be key for success are uncontrollable variables such as ability and external variables. What is missing from these studies is a methodological approach that provides the skiers an open forum to share their perspectives on what leads to success, what frees them to perform well, and what mental skills or perspectives they use or find helpful. A qualitative interview study designed to gather relevant first-hand detailed information from elite athletes would help to fill this gap.

Normally books are not a primary source of information for a review of literature in a thesis. However given the scarcity of published research in the area of success

elements for elite skiers, books based on experiences of athletes were found to be an important source for providing perspective in this study.

Some in-depth interviews were conducted by Orlick with elite World Cup downhill ski racers to explore the success elements employed with respect to speed, risk, high rate of injury, and the occasional death. Many elite BM freeskiers have a rich history in high level alpine racing, making high level alpine ski racers probably most closely related to BM freeskiers. Orlick reported some of these interview findings in three books; *In Pursuit of Excellence* (2000), *Psyching for Sport* (1986), and *Embracing Your Potential* (1998). Karrin Lee Gartner stated that the most important mental skills for her to succeed as a world class alpine ski racer (and Olympic downhill champion) were imagery, focus, and complete confidence in her abilities. Through effective imagery sessions, Gartner was able to remain both mentally and physically sharp throughout rehabilitation periods after major injuries. Orlick (2000) stated; “a fully connected focus releases you from everything irrelevant and connects you totally with your experience or performance” (p. 7). When asked about her focused connection, Gartner stated that she was completely focused due to her years of preparation. She describes her feeling of complete focus as a transformation from “thoughts into feelings and natural motions on skis” (Orlick & Lee-Gartner, 1995, p.52). Both Gartner and another world class ski racer, Kate Pace (World downhill champion), mentioned the importance of using quiet time to relax, focus on what they want to do, and plan on how they are going to get there. Steve Podborski attributed his eight World Cup wins to a mental step that simply allowed him to enter a mindset in which he would recognize the fact that he *could* win if he did things right and then focused on doing it.

One of the most interesting and informative pieces of literature related to the success elements of ski performance was found in a book entitled *Into the Yikes Zone: A Conversation with Fear*. This book written by Blakeslee (2002) explores the relationship between fear and skiers, and more specifically, how fear enters the experiences of skiers, and how the skiers react to that fear. Blakeslee states that;

By regarding fear as a pathology to control or cure, we assume that life without its presence is possible, normal, or even desirable. But once we accept fear as a habitual acquaintance in an imaginative, meaningful life, we can begin to cultivate a conversation with it rather than engage it in a fight. (Blakeslee, 2002, p. xvii)

BM freeskiing by nature is a battle with the knowledge of our skills, uncertainty, and fear. To excel in this high-speed, high-risk sport, athletes must use certain success elements, specific to them, which allow them to overcome the uncertainty and fear.

Blakeslee's book provided a very interesting perspective on the fear in skiing and helps to understand fearful situations that skiers experience, and how they overcome the fear to enjoy successful performance.

Moore and Stevenson (1994) discussed using trust as a psychological skill to overcome performance fears. A major difference is that the fear Moore and Stevenson spoke about, dealt with perceived performance outcome of winning or losing, whereas the BM freeskiers have to deal with not only the fears of winning or losing, but the primal fears of dying. Some of the benefits of trusting one's abilities mentioned in this study were the ability to free oneself from previous breakdowns of trust leading to less than best performances. Due to the consequences of a poor performance in BM freeskiing, trusting one's abilities is crucial. The authors of this study suggest and provide an outline

for exercises to train one's trust toward their performance. I would argue that trust is a by-product of effective preparation, thus preparing thoroughly for one's performance increases one's ability to trust. It does not appear to be a wise or practical step to set aside time to specifically train one's trust, without training what leads to trust especially in a high risk sport.

An examination of the research on the psychology of skiing revealed that limited quality research has been done in this area. The research that has been done has dealt with individuals participating in traditional styles of skiing, mostly at the intermediate-advanced level. No study has focused on elite BM freeskiers.

#### *Alternative Sports: Thrill Seekers*

Some studies have been carried out to explore risk sport participants. Most of the research to date has been concerned with the personality types involved in activities that value high risk. The participants in these sports have been termed "stress-seekers" (Klausner, 1968), "sensation-seekers" (Zucherman, Kolin, & Zoob, 1964), and "eudaemonists" (Bernard, 1968).

There have also been studies conducted on the intrinsic motivation of individuals engaging in high-risk behaviour. Physiological, psychological, and neurological factors have been explored with regards to this behaviour. Stress seeking is viewed as a way to fulfil a need for arousal (Klausner, 1968), for stimulation (Farberow, 1980), as a way to develop capacities for competent control over environmental objects (Klausner, 1968), as a form of tension-reduction behaviour with addictive qualities related to the buildup of intoxicating stress hormones (Delk, 1980), and as "indirect self-destructive behaviour"

that functions as a defence mechanism against depression and despair (Achte, 1980; Filstead, 1980; Litman, 1980).

Kiewa's (2002) sociological study examining the way in which rock-climbers incorporate their leisure activities into a social context, discusses the acceptance of uncertainty of outcome, the risk of injury, and the possibility of death within their daily pursuits in their sport. This is quite different from the norm of North-American society, which for the most part is concerned with minimising risk and avoiding death for as long as possible (Heywood, 1994). Precautions taken by sensation seeking athletes, such as, detailed guidebooks, technological advancement in equipment, and physical preparation, reduce the amount of uncertainty.

An interview based exploration of success elements used by athletes in a sport that includes an element of high speed and high-risk such as BM freeskiing, has the potential to provide interesting insights due to the lack of research conducted in this area, as well as the uniqueness of the sport. When Lyng (1990) wrote about the limited research on alternative high risk sports, he stated, "the main shortcoming of this work is its failure to provide a causal explanation of voluntary risk taking" (p.853). This was not the primary purpose of this thesis but a question was included that shed light on why these athletes choose to engage in such a high risk sport.

The next chapter outlines the purpose of this study, the methods that were used to ensure that the interviews were conducted and analysed in a meaningful way, and the process by which success elements were identified.

### Chapter III: Methodology

The purpose of this study was to gain an understanding of the success elements employed by elite BM freeskiers to perform their best while immersed in the alternative sport of BM freeskiing. This was accomplished by conducting in-depth interviews with nine of the best BM freeskiers in the world.

Thomas and Nelson (1995) stated that the principle characteristics of qualitative research include; “precise and detailed recording of what happens in the setting...” as well as “data interpretation and analysis through the use of rich description, interpretive narratives, and direct quotes...” (p.21). To capture the essence of the topic of interest for this study, a subjective qualitative approach was chosen. This section outlines the specific elements of qualitative research that were used to successfully conduct the research, including (a) paradigm and research design, (b) instrumentation, (c) participant information, (d) data collection procedures, (e) pilot studies, (f) data analysis, and (g) means of enhancing trustworthiness.

#### *Research Paradigm and Design*

According to Denzin and Lincoln (2000), the paradigm in which the researcher is situated will determine the research design that will be used to conduct the study.

Therefore the paradigm in which the proposed study was conducted will be explored before discussing the research design.

Martens’ (1987) article in *The Sport Psychologist* outlined the importance of a paradigm shift in the world of sport psychology from positivist to post-positivist. Martens identified some of the problems that existed with conducting sport psychology research with orthodox research methods.

According to Lincoln and Guba (1994), the ontology of the post-positivist paradigm lies in critical realism, in that the existing reality due to the flawed human intellectual mechanisms and the nature of the phenomena, can only be apprehended imperfectly. The phenomena of interest for this study was subjected to wide critical examination (through the methodological process) to apprehend the reality as close as possible which is in accordance with Lincoln and Guba. The ontology of post positivism will provide the freedom to explore each athlete's reality of success elements. The epistemology of modified dualist/objectivist as stated by Lincoln and Guba coincides with this study as dualism would be very difficult to maintain due to the researchers experience/ involvement with the phenomena of interest. Objectivity remained as an ideal by comparing the findings of this study to pre-existing knowledge, and with the guidance of the critical community formed by my supervisor, committee members and peers.

To explore the success elements used by elite BM freeskiers within the post-positivistic paradigm, a qualitative research design was used. According to Denzin and Lincoln (2000), in the methodological approach of post positivism, the main elements of a qualitative research design is that it incorporates a holistic perspective to the phenomenon in question; it is not constructed to prove something or to control people and it looks at relationships within systems or cultures. Each of these elements was crucial for the gathering of meaningful units of data from the participants of this study. Denzin and Lincoln stated that qualitative research design should always have built-in flexibility to allow for discoveries of new and unexpected empirical materials and growing sophistication. Within the qualitative research design that was used for this study, there were fixed elements such as planning interviews, observations, and documents, as well as

improvisational elements such as the conversations with the interview partners. Lincoln and Guba (1994) stated that by performing the inquiry in a more natural setting some of the problems of other paradigms are redressed. By performing one individual semi-structured interview with each participant in a relaxed environment assist in determining the elements each participant employed for a successful performance.

### *Framework*

Orlick's (2000) Wheel of Excellence provided the framework for this study. The seven elements of the Wheel of Excellence surfaced from thousands of interviews with elite performers from many performance domains. Questions were asked about best performances, what each athlete or performer felt contributed to their best performances and what was required for them to be successful in their pursuits. The Wheel of Excellence approach to understanding elements of excellence was used in this study to create the interview questions providing structure and consistency in conducting the semi-structured interviews.

To avoid imposing thoughts or theories on the participants, the interview questions for this study were presented to the athletes without mentioning elements from the Wheel of Excellence or using terms in the wording of the questions. If a participant mentioned a success element from Orlick's Wheel of Excellence, then the role of that element in their performance was explored in detail, by asking the participants to share personal examples related to that element or their experience with that element. If a success element mentioned by the athletes went beyond the Wheel of Excellence or did not correspond with the existing literature, the terms these athletes used were explored in

detail. At no time were the terms used in previous research or the literature imposed on the athletes in this study.

Any success element mentioned by the athletes that they felt contributed to their success was included and presented in detail with supporting quotes, regardless of whether or not it was a part of the Wheel of Excellence. These additional elements may contain extremely valuable information about how people can perform optimally in a high risk sport with a high consequence for error.

### *Instruments*

Semi-structured interviews were used to gather meaningful units of data from the interview participants. The semi-structured interview enables the interviewer to explore specific topics of interest, within a flexible conversation with the interview participant (Rubin & Rubin, 1995). The flexibility provides the opportunity for unexpected meaningful information to surface. An interview guide was used to provide a framework of questions asked to each participant to gather similar data. The guide was composed of both grand tour questions, and follow-up questions of interest in which probing was used to gather more detail. The grand tour questions provided participants with the opportunity to share their experiences in an open and flexible environment. Probing for details of interest occurred as the participants responded to the main questions.

In this study, the interviewer served as the instrument to explore relevant experiences and information. As the interviewer for this study, I have taken the following steps to strengthen my abilities at carrying out the interview process. I was exposed to the skills for conducting effective interviews by taking a micro-counselling course. This course provided me with the opportunity to acquire experience in conducting interviews

and engaging in purposeful conversation. Some of the main lessons learned from this course included the importance of attending to individuals, being in the moment with them, and having the patience to allow them enough time to share their experiences in full detail. Other steps taken to strengthen my interviewing skills included studying audio-tapes, video tapes, and transcripts of interviews conducted with elite performers by my supervisor Terry Orlick, reading books on the face-to-face interviewing, and taking a qualitative data gathering course.

### *Participants*

Nine participants, seven men and two women were interviewed for this study. Both men and women were interviewed, simply because both genders participate in the sport of BM freeskiing. The athletes were all North American, seven athletes were Canadian and two were from the United States. The participants were all between 20 and 35 years of age, and each participant was an elite BM freeskier. The accomplishments of these elite performers are included in table 1 below. For the purpose of this study, elite was operationally defined as any athlete who had placed in the top five of an International Freeskiing Association (IFSA) event, or an athlete who had contributed to the BM freeskiing world through their efforts by skiing in major films. Only the best BM freeskiers are asked to perform in the filming industry of the sport. This ensured that these participants were truly world class performers in the realm of BM freeskiing. See Table 1 for the results these athletes have accomplished in world class BM freeskiing competitions, as well as movies to which they have contributed.

Some of the athletes requested to have their names directly linked to their quotes in the final document rather than being identified by numbers or pseudonyms. Upon this

request all of the other athletes were contacted and asked if they had concerns with this.

All these high performance athletes preferred this option, thus the names of the athletes

have been included with their quotes.

Table 1

Participant Accomplishments in the World of BM Freeskiing

Participant name and Gender	World Tour Results	North-American Tour Results	Filming <sup>a</sup>
Abma, Mark (M)	<sup>b</sup>		Yearbook
Ashton, Jenn (F)	2002 Overall champion; Canada (1 <sup>st</sup> ), USA (2 <sup>nd</sup> ) 2003 Overall champion; Canada (1 <sup>st</sup> ), France (3 <sup>rd</sup> )		<ul style="list-style-type: none"> <li>○ Journey</li> <li>○ Storm</li> <li>○ Cold Fusion</li> </ul>
Fisher, Wendy (F)	1996 Valdez (AK) (1 <sup>st</sup> ) 1997 Valdez (AK) (1 <sup>st</sup> ) 1998 Canada (2 <sup>nd</sup> ) 1998 World Cup of Extreme skiing (Gold) 2000 Gravity Games (2 <sup>nd</sup> )	1991 Crested Butte (1 <sup>st</sup> ) 1996 Squaw Valley (1 <sup>st</sup> )	<ul style="list-style-type: none"> <li>○ Pura Vida</li> <li>○ Ski Movie 2</li> <li>○ Front Line</li> <li>○ Focused</li> </ul>
Harrison, Hugo (M)	2002 Overall champion; Canada (2 <sup>nd</sup> ), USA (2 <sup>nd</sup> )		<ul style="list-style-type: none"> <li>○ Ski Movie 3</li> <li>○ Focused</li> <li>○ Yearbook</li> </ul>
Law, Jonny (M)	2003 2 <sup>nd</sup> overall; USA (1 <sup>st</sup> +sick bird award), France (2 <sup>nd</sup> )	2003 1 <sup>st</sup> 2003 2 <sup>nd</sup>	Soul Purpose
Leblanc, Pierre-Yves (M)	2002 2 <sup>nd</sup> overall; Canada (1 <sup>st</sup> ) 2003 Canada (3 <sup>rd</sup> )	2002 Red Mountain (2 <sup>nd</sup> ) 2002 Lake Louise (1 <sup>st</sup> )	
Morrison, Seth (M)		1998 Crested Butte (2 <sup>nd</sup> ) 1999 Crested Butte (2 <sup>nd</sup> )	<ul style="list-style-type: none"> <li>○ Ski Movie 3</li> <li>○ Seth Morrison Chronicles</li> <li>○ Focused</li> <li>○ Yearbook</li> </ul>
Oakden, Ryan (M)	2001 France (1 <sup>st</sup> )	2001 Snowbird (3 <sup>rd</sup> ) 2002 Whistler (2 <sup>nd</sup> )	Ski Movie 3
Stevenson, Mike	2002 Canada (3 <sup>rd</sup> )	Crystal 2004 (4 <sup>th</sup> )	Disturbing the

(M)			Piste
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<sup>a</sup> Many of the athletes are in more movies than what is shown, but were not included due to space limitation. <sup>b</sup> Did not compete in BM freeskiing. Mark entered directly into the world of BM freeskiing filming, from his experience as a park freeskier, and an elite mogul skier.

“Qualitative researchers employ theoretical or purposive, and not random, sampling models. They seek out groups, settings, and individuals where and for whom the processes being studied are most likely to occur” (Denzin & Lincoln, 2000, p.370). In order to select participants who fit the criteria mentioned above, purposeful sampling was used.

#### *Data Collection Procedures*

Face-to-face interviews were the main source of data collection in this study. A face-to-face interview was conducted with all but two athletes, in which telephone and e-mail were used due to geographical restraints. Telephone and e-mail interaction was used to build rapport with the participants prior to conducting the face to face interview and also provided an opportunity to present important grand tour questions and obtain responses. This gave the participants an idea of the nature of the study and allowed the interviews to be more detailed and specific, as the interviewer was able to probe into the participants' answers to questions already presented via the telephone and/or e-mail.

The face-to-face interview conducted with each athlete took place in a setting that was private, and quiet enough to limit distractions. After completing the initial interview, it was immediately transcribed verbatim and a decision was made as to whether follow-up questions would be needed and whether adjustments might be needed to improve the flow of the text. The interview guide did not undergo many refinements, however three

athletes were contacted a second time to clarify some responses to certain questions. The second interview, which only occurred with these specific athletes was conducted, via e-mail due to geographical constraints.

### Pilot Study

Two pilot interviews were conducted to ensure the chosen methods and interview guide led to the collection of meaningful units of data. Thomas and Nelson (1996) stated that “*no single item in this book is more important than our advice to pilot all your procedures*” (p.67). A BM freeskier and a professional downhill mountain biker participated in the pilot study. The BM freeskier met the qualifications for this study in terms of his performances within the sport. The professional mountain biker provided adequate credentials to test the methods chosen for this study due to the similarities of downhill mountain biking and BM freeskiing. Both participants in the pilot study did not participate in the broader study itself. The pilot interviews went very smoothly, the questions were clearly understood, both athletes were very engaged for over an hour and a half, and their responses provided insight into the possible categories in which the gathered information would be coded.

### *Analysis*

This study involved both inductive and deductive methods for analyzing the data since Orlick’s (2000) Wheel of Excellence was used to analyse the gathered data, and because of the built in flexibility into the framework to allow data outside of existing literature to surface.

The data analysis process began by conducting the interviews (Rubin & Rubin, 1995), by listening to the interviews, followed by the transcription of the interviews

(Maxwell, 1996). Due to personal preference, the researcher then took the hard copies of the transcribed interviews to code the information into sections of meaningful units of data, by hand rather than using the Nvivo computer software. It is noted that Nvivo software is not actually a form of analysis, it is a means of grouping information into clear organised sections, which then can be analysed by the researcher. During the pilot study, we were open to the possibility that the initial categories might be based on elements of Orlick's Wheel of Excellence. However, after transcribing a number of interviews, several more natural, temporary based themes emerged from the data. In order to respect the emerging data as fully as possible, these themes were used for initial categorization purposes.

The data analysis was deductive in that, Orlick's (2000) Wheel of Excellence helped categorize the emerging data. However the inherent flexibility of the framework of this study enabled themes to emerge that were not situated in existing literature, in this sense the study held an inductive quality as well. During the interviews with the participants, as well as during the initial analysis of the data, a pre-performance preparation phase, a performance execution phase, and a post-performance analysis phase emerged. These temporal phases were combined with two additional elements that emerged, which extended beyond any single temporal context. This included the love the athletes have for their sport, and the focused-connection they have throughout their pursuits. Within these five major categories, some of the elements of Orlick's Wheel of Excellence emerged and were grouped and discussed within these five major categories.

Dr. Orlick and our research group helped in deciding the final categories in which the entire data set was then coded. We had weekly meetings throughout the year and

devoted several meetings to the discussion of this data. The meaning units of data were continually situated in the raw information of the interviews, to ensure the context of what was said remained in the forefront.

### *Trustworthiness*

Before I began this study, I was interviewed by my supervisor, Terry Orlick, with regards to my involvement and the success elements I employ in BM freeskiing as an athlete. We discussed my experiences, perspectives, fears, joys, and the mental training techniques that I used to recognize and develop my success elements, and perform at my highest level. Through the process of answering Dr. Orlick's questions, my personal orientations and biases surfaced. Denzing and Lincoln (2000) state that "Qualitative researchers have to accept the fact that research is ideologically driven and that there is no value-free or bias-free design" (p. 385). A researcher should recognize the importance of self-reflection on the research subject to expose personal biases and to avoid imposing one's views on the participant. I feel that being interviewed by Dr. Orlick not only allowed me to experience a high quality interview process but also successfully made me aware of my own biases towards this research subject. I feel confident that I was able to identify my biases and limit the influence that my biases had on this study and the manner in which the interviews and overall project was conducted. The pilot studies helped me to fine tune this process.

Following each interview, the participants were sent a copy of their transcribed interview for member checking. This allowed the participants to read the transcript and provide any feedback with regards to the text. I received phone calls and e-mail messages from the athletes confirming the accuracy of the transcribed interview, as well as

questions or concerns they had, which were then dealt with immediately. For instance, the informal nature in which the athletes spoke during the interview and the verbatim transcription caused concern for some with regard to the language they used. The concerned individuals were reassured that quotes used from their interview would be altered for grammar and clarity when needed, but that there would be no changes to the message they were conveying.

A peer debriefing process took place, which included my thesis supervisor and the other graduate students from our sport psychology graduate research team who have also conducted interview studies with elite performers in other performance disciplines. Their collective knowledge and guidance helped to achieve the intended goal of understanding the success elements employed by the athletes in this study.

The high achievement, high performance nature of the population of participants in this study adds trustworthiness to the findings. After conducting hundreds of interviews with Olympic athletes, Orlick and Partington (1988) came to the following conclusion: “We independently came to the conclusion that it would be extremely difficult, if not impossible to manipulate the responses of these high level Olympic achievers” (p. 108). The elite athletes that were interviewed for this study were not a part of a population of beginners or insecure people who can be easily influenced by what the interviewer says.

Janesick (1998) mentions that the human and passionate element of research has somehow been lost. Denzin and Lincoln (2000) state that: “becoming immersed in a study requires passion; passion for people, passion for communication, and passion for understanding people” (p.394). I am a passionate persona. I am extremely passionate

about sport psychology, success elements of elite performers, and BM freeskiing. I have passion for people, passion for communication and passion for understanding people, especially for understanding successful people pursuing excellence in high risk sports. This passion has fuelled my efforts in the pursuit of completing this study in an accurate and meaningful manner so that I do justice to the athletes who shared so much of themselves with me.

Maslow (1966) states that to know another person, one must become the other person, and when this is achieved, experiential knowledge from within occurs. He states:

I know it because I know myself, and now it has become a part of myself. Fusion with the object of knowledge permits experiential knowledge. And since experiential knowledge is the best kind of knowledge for many human purposes, a good mode of cognizing an object is to move toward fusion with it. (p103)

By competing in BM freeskiing events, I have gained a great deal of experiential knowledge of the sport and those who participate in it. By immersing myself in this sport, I have a firm grasp of many things that an “outsider” would not know, such as my understanding of the people who make-up this unique culture, and the language that they use to communicate. Thomas and Nelson (1996) stated, educational background and the ages of the subjects who are to be questioned will provide information into the appropriate vocabulary and questions to be asked to the participants. I strongly feel that my involvement in the sport of BM freeskiing gave me an advantage in interviewing those involved in the sport over someone who was not involved in the sport, especially because I knew the vocabulary that the athletes use to describe their reality in BM freeskiing. The interviews were conducted in a very relaxed and comfortable atmosphere,

in which the athletes were able to use their own language, and share examples without being concerned that I would not understand or appreciate their effort to share their detailed experiences. I took advantage of my experiences to draw out details that will be beneficial for all of us to fully understand what the participants said.

### *Limitations*

I attempted to limit the influence of my personal biases on the participants by thorough preparation, asking open-ended questions about their personal experiences and perspectives, and asking the athletes to explain themselves regardless of whether I understood them or not. It is still possible that my experience as a BM freeskier influenced some responses so we must accept that as a possible limitation.

The far ranging geographical locations in which the athletes live made it difficult to perform multiple interviews. For a master's thesis without funding, the time and cost of conducting multiple face-to-face interviews is prohibitive. I was fortunate enough to take one trip out to Whistler, British-Columbia to conduct interviews with some elite BM freeskiers, however the follow-up communication with the athletes took place via telephone and e-mail.

## Chapter IV: Results

The purpose of this study was to gain an understanding of the success elements employed by elite BM freeskiers to perform their best while immersed in the alternative sport of BM freeskiing. This was accomplished by conducting in-depth interviews with nine of the best BM freeskiers in the world. These interviews opened the door to discover success elements needed to excel in a high-speed, high-risk sport, where errors can result in serious injury or loss of life. The larger goal of this study was to contribute our overall understanding of elements of excellence that lead to success for elite performers in different disciplines.

The results of this study clearly indicate that these elite performers identified specific performance factors that they felt were essential for successful high level performance and then acted on these factors or success elements on a regular basis. The success elements that the athletes identified are presented in this chapter and are supported with rich and detailed quotes from the athletes themselves.

After carefully reading all the interview transcripts and conducting an initial analysis of the interview data, it became apparent that there was a temporal component associated with most of the success elements discussed by the athletes. The three main temporal categories were pre-performance preparation, performance execution, and post-performance reflection. Within each main temporal category, there were a number of specific success elements mentioned by the participants. Therefore for simplicity and clarity of presentation, a decision was made to present the data in these three main temporal categories, and within each of these temporal categories to include the specific success elements associated with each category.

There were also two success elements discussed by all athletes that seemed to transcend these temporal categories. They were more holistic and all encompassing concepts that expanded beyond time, and were more related to a way of being or experiencing. These larger or more encompassing success elements were directly related to what the participants loved about their sport (and life), and the extent to which they carried a focused-connection into their pursuits. A decision was made to present these two powerful success elements separately due to their importance and pervasiveness.

For clarity for the reader, a contextual description of a routine performance day of a BM freeskier will be presented first in this chapter. Following this description, the data will be presented in the following sequence; 1) The love of doing and being, 2) Pre-performance preparation, 3) Performance execution, 4) Post-performance reflection and 5) Focused-connection.

*Contextual Description of a typical routine or performance day of a BM freeskier*

BM freeskiing is a high-risk sport that involves skiing down the side of steep, huge mountains. Many people have a limited understanding of what it actually is that these athletes do. A contextual description of a typical performance day for a BM freeskier has been included here to provide some basic details about the sport to help the reader understand what a BM freeskier has to deal with on a daily basis. It may also help to better understand the relevance of certain elements of success that these athletes discussed in their interviews. The information for this contextual view was gathered inductively from the transcribed interviews as well as from the researchers' personal experience with BM freeskiing.

Preparation for the typical performance day for a BM freeskier begins well before the big day arrives. Each participant in this study started their skiing career around the age of three or four. From that point, the participants have experienced many things on skis creating a large memory bank of actions and reactions that lead to successful and unsuccessful experiences. By reflecting on these experiences almost all athletes identified the importance of physical fitness for success as a BM freeskier, and thus they follow a rigorous physical training routine in their lives.

With extensive alpine skiing experience, back country freeskiing experience, a physically trained body, and a desire to test their skills on a BM challenge, the athletes head to the mountain to begin preparation for a BM freeskiing run or competition. Upon arrival at the mountain, the athletes head to the venue to begin selecting and inspecting the line they will ski. The line selection/ inspection process is an area of BM freeskiing that differs from many sports. The path that athletes choose to ski is completely up to them to decide (with the help of the mountain). There are no gates or specific features that the athletes must include in their runs (there are general boundaries assigned to each venue due to visibility for the judges). Line selection/ inspection is a creative process in which risk management is used as the skiers must be aware of their abilities and match that with a run that is challenging enough to post a good score, all the while aware that something overly challenging may lead to a loss of control, poor score, and quite possibly severe injury or death. The biggest determinant in the line selection/ inspection process is environmental conditions. Where are the rocks and drop-offs? What is the falling distance of the cliff? Is the snow deep? Has there been new snow? Is it cold? Is there wind? Will the run I want to do be tracked out because I start late? You could pre-select a

line and then show up on the day of the competition and it may be impossible to do. Therefore the athletes must have backup lines in mind in case of altering conditions. As you will see further in the results section, these elite athletes are very good at asking the mountain where to ski rather than telling it where they are going to ski.

Upon selecting a general route, the athletes will move in closer to scrutinize their line, looking for potentially dangerous obstacles both large and small that they may encounter during the course of their performance. Many times the pitch of the run is steep enough that the athlete can only see about fifty feet of terrain in front of them before it falls away. The inability to see the entire run causes the individuals to inspect the run relentlessly, looking for any landmarks that can help them find their way through the maze of snow and rock. Lining up terrain on their run with landmarks in the distance is a common technique used to be aware of their location. One athlete mentioned that he asks the helicopter pilot to tap the ski of the helicopter on certain areas of the snow to provide visual cues as to where the skier should be and where he should head next. This specific technique is used during freeskiing filming sessions and not during competitions.

Many athletes mentioned that they choose their lines according to how they feel that day and the environmental conditions. They are also driven by the pleasure of pushing limits, and they want to do a run that is challenging and fun for them so that they can gain extreme enjoyment from the experience. Some are seeking a run that is possible but only barely possible if they do everything right.

With the line inspected, chosen and inspected again, most of the athletes then visualize themselves skiing the line. They all said that they see the images through their own eyes, trying to picture what they will see when they actually ski the line. A couple of

athletes stated that they were proficient enough with their visualization that they can feel the timing of the turns that they will make during the run, as well feel the amount of time they will be in the air off cliffs.

Once these elite skiers have decided on a line, they are confident and committed to the line they have chosen to ski. They then focus on relevant things (or nothing negative) until it is time to ski. One of the main elements they focus on during the waiting time is remaining calm. Calmness is achieved and maintained by using distraction control techniques such as self talk, positive thoughts, and breathing techniques. Most of the athletes talked about allowing themselves to raise their state of arousal at the right time. If they got pumped up too early they would make themselves nervous, and if they were too late they would not be in an alert enough state to do well right from the start. This heightening of emotion and focus on the task at hand usually takes place seconds before they go, and it is important that the heightened state of arousal is still quite low as compared to other sports and previous research findings.

As previously mentioned, the environment in which these athletes perform is quite dangerous. Each performance is an intense experience with paradoxical feelings of life threatening fear, and intense joy, felt almost exclusively and definitely most frequently while BM freeskiing. The success elements to perform optimally while engaged in the run will be explored further in this results section.

Due to the intense emotional experience of facing the fear of death, many of the athletes talked about taking a moment after each run to think about what they had just done and put some feeling of closure on the experience. This process of reflection opens their mind to draw lessons from the experience and further develop their mindset.

With a deeper understanding of what it means to be a BM freeskier, the specific success elements used by the world's best BM freeskiers will be presented.

*The Love of Doing and Being*

The love elements mentioned by the participants included; the challenge/achievement in their sport, skiing in powder snow, and being a part of the powerful elements of nature. They also mentioned loving the sense of control, the intense emotions, and the feeling of being totally in the moment.

It was clearly shown throughout the interviews that the love for what these athletes do was one of the key elements to pursuing, persisting, and succeeding in such a high-risk sport. Mikey Stevenson said, "It is very much a sport that just like other ones, you have to develop a love first."

I think you have to love it very much. That is how you are going to do well. It is like anything, if you like your job you will be good at it. The best guys in skiing they're the guys who love it the most. They are always there and they are stoked to be there. (Hugo Harrison)

It was all about the joy of the sport for sure, for me it was a huge portion of my success. And other things I mean like working hard and stuff. But once you lose the love of something or you are just depressed you can't perform....It is the pleasure of the sport that has totally taken over the little issues. I do have a passion for it, I do think that it is really fun, and it is one of the purest, coolest kind of feelings that you can do. (Wendy Fisher)

Like kids...you have to have a passion for it, you have to love it. Otherwise what are you doing it for? You don't want to do it because other people are doing it, or

because it is the cool thing to do. So have the love for it and then be ready to work hard for it. (Mark Abma)

Every single participant said that they love the challenge of BM freeskiing. In a very real way, due to the extremely dangerous environment in which these athletes perform, the ultimate challenge of BM freeskiing (aside from the challenge of performing better than the other competitors) is surviving the ski down the mountain. These athletes perform in an extremely dangerous environment. Facing the danger (and even embracing it), meeting the challenge head-on and emerging alive, is one aspect of the sport that these athletes love. One of the reasons they perform so well at the elite level in this sport is because they love doing it and finding a way to get themselves through the tough challenges. Jonny Law talked about his love of the challenge in this sport in the following way:

When I am going skiing, when I am in the gondola, and there has been some snow, or even when there hasn't, almost everyday I almost feel sick going up the mountain. It is almost vexing really because you are doing something and you want to do it, you are excited to do it, but you are scared and sick about it.

It leaves once I get on snow almost immediately. I think it is the challenge I find it to be enlightening, when you are on top of something and you know it is a bad idea. Even cliffs I have hit before like a fifty footer or something, it can be done, but it's still, 'I am going to jump off of a fifty footer here'. And you know you have had buddies hurt themselves, and you have been hurt doing stuff like this. You are like, 'no problem'. And then I find that before you do it, you are very anxious. You are kind of fighting common sense. Because your common sense

tells you no, just ski around have some fun. But you have to fight that, and I think that is what is exciting because when you can finally decide that 'I am doing it' and then you actually do it. That is what I think it is all about, that split second where you're mentally strong enough. Maybe it is, that you are ignoring common sense and doing what you want to do, what you think you can do. There is a quote by T.S. Elliot that I like, it goes "only he that will risk going too far, can possibly find out how far one can go." I think about that a lot. It is never going to be comfortable to try to excel at something. (Jonny Law)

In the preceding quote, Jonny discusses the inner battle that is going on between his common sense, which is telling him to avoid the danger of the cliff, and some other voice that is telling him to launch his body off the cliff into space, and uncertainty. For most people, this mental battle would not exist, they would simply not launch themselves off of a fifty foot cliff. There must be some strong motivating factor to leave one's comfort zone and direct oneself through this kind of uncertainty. The answer may lie in another element of BM freeskiing that the participants say they love, and that is the emotional reward they feel upon successfully completing something that they thought was challenging or barely humanly possible. Mikey Stevenson said, "Yeah it is about feel, it is a feel sport...getting fired up about something and then doing it and you feel rewarded after."

I get these rushes of self fulfillment over doing something that some people might find crazy. And it is not self fulfillment, like I am the man, I totally stomped that! It is more like I brought myself to do this, and I was able to control the situation. It is a feeling that I can't really describe. (Jonny Law)

Let's say that you do something where fear comes in, like 'oh I could fall here or fall there' but if I ski here around this and around there and it goes perfect and I am out, you are like 'wow'. It is such a big feeling you get of achievement. And even if there are all those elements of death, and even though there is all that risk, it is a big achievement. By achieving something like that and defeating all the risk, it is a big achievement and a big challenge and you get really proud. (Pierre-Yves Leblanc)

Sure (there is risk). But usually, as I am doing it I am like 'Oh God, Oh God, Oh God', and once you are ok, that's awesome. It is like the best time. When you are like 'oh fuck, oh fuck, oh fuck' and then 'whew'. That's when the adrenaline kicks in and you are like 'yeah'! JC: Is that your favourite time? JA: Afterwards yeah....Yeah you did something that scared the piss out of you, and you pulled it off and you are just stoked. Crazy buzz. (Jenn Ashton)

There is no doubt that BM freeskiing is a sensation packed sport that generates intense feelings and emotions. Once these skiers had experienced free skiing in dry powder snow, their pursuit was to relive those feelings as much as possible. They describe a "perfect" powder day as an amazing combination of opportunity, skill, dedication, and coincidence. Each participant mentioned the powerful effect that skiing in champagne powder had on them. Ryan Oakden said, "Just knowing how much fun it is (to powder ski)...of how it feels. You know it is powder and that anything can happen."

If tomorrow is going to be sunny and stable (and there is pure powder snow), I can't sleep because I know it is going to be like that, even though I have a broken leg. You know it is the green light, even if I can't take it, I know it is on. JC: And

how does that make you feel? PY: It is like you are going to meet a girl that you have been talking on the phone for a month and you are going to see her the next day. You know you have butterflies and you can't stop thinking about it. And (for powder skiing) you are trying to get everything ready and you watch the videos and you get the visualization and you watch the good skiers or whatever the trick you want to do. That is how I am. I can't sleep I wake up. I am usually up at four.  
(Pierre-Yves Leblanc)

You don't even have to be the best skier to have a good time skiing powder, because like for me now it is the easiest conditions to ski in. JC: Good powder? MS: Yeah good powder. And you know it lets you do more stuff. But just the feel of it, it is just buttery smooth and you can go so fast and it is almost like peaceful at the same time. JC: What do you mean by peaceful? MS: Because it is a quiet thing. You are going over the snow at a hundred miles an hour, and there is no engine, no nothing, you are in your own body, and that's it. It is a pretty crazy sensation, like slopes you can rip down super smooth without feeling anything under your feet. Yeah so that's what gets me about it really. You can be going full speed and be using very little energy. The nicer the snow is and the smoother it gets, the less energy you use doing it. JC: Why do you say you use less energy? MS: Just because it is a smoother surface your legs don't have to work as hard to keep you stable, and you are standing on top and just going. And once you get a little bit of speed going and you get comfortable with that, skiing faster is easier in a way as well. You are not fighting it as much. It is like watching people who

can't swim, try to swim, they are thrashing around and stuff. They can't stay a float. (Mikey Stevenson)

MA: I think once you find that moment when it all just flows on it's own, that's when you have found that point. JC: Have you found that point often? MA: No not really. I can't say that I have ever felt that in moguls. You are just like grunt, grunt, grunt, getting ready for the moguls getting ready for the air, trying to think about jumping, but it never has that flow. It is basically just in powder you know, fucking hell man this stuff is just money! What else comes close to that? Skiing through, floating through, like water isn't even the same because it is so much harder. It is floating, pretty much. You are just at the will of gravity, then it is just pulling you down. And I am trying to work with gravity. You don't want to be fighting with it in that aspect. Making it look smooth and working with gravity, not going right down the fall line, you are using the whole mountain to control your speed you know? (Mark Abma)

The love these athletes have for powder snow is directly linked to another major area of love in their life which is the connection with nature and the powerful elements that make up the playing field in which these athletes perform. The love of being in this natural setting is a powerful motivator for the athletes and they prepare as well as they can to ensure they can perform at their best in these extreme environments. Pierre Yves Leblanc discussed the connection he created with the mountains as follows:

I love it. I just fell in love with the elements, the landscape, the strength of all that stuff....I felt really good in the mountains. I felt that I had a super good relationship with the mountains and I was talking to them and then really know

when it was time to go and when it was time not to go. And I would say where do we ski today? Where is the snow? Where is there not snow? And then we choose our path. Everywhere else the mountain was telling me not to go there, and that takes a lot of years but I was so into it that I got this relationship with the mountain. (Pierre-Yves Leblanc)

It is almost like it is spiritual, how you and the mountain come together like that.

JC: Why would you say that it is spiritual? MA: I just wouldn't know how else to put that kind of connection. Just like when you are in a place where there is that much power, but at the same time it gives out so much love. It is pretty cool.

(Marc Abma)

I just love being in the mountains. That is something that I always like.

Sometimes when I am on top of a really big line I feel small. That's the cool thing of it. It is a totally different sport but you have to have the same feelings because you are out there in the elements. (Hugo Harrison)

When asked if anything else in his life gave him the same feelings that he gets from BM skiing, Pierre Yves Leblanc responded:

No, no, nothing. The number of elements you are dealing with. I am also such a beginner at everything else. I cannot get close to the feeling that I get BM skiing. Let's say I go biking... the earth is not moving. It doesn't matter if it is raining or sunny, there are no pow days, there are no avalanche cycles, no winds (like up on mountains) nothing like that. It is pretty consistent compared to skiing. That is why skiing is very inconsistent, you can get the worst days, the most dangerous days where you can kill yourself going off of a little side air, and you can't even

walk because there is that much slush, like mashed potatoes. And then you go another day and it is dry snow very stable and sunny. You get both extremes, one day you hate it, it is the last place on earth you want to be and then the next day is heaven. This is different compared to other sports where it is consistent, pretty good every day but never amazing and never super bad. And that's what BM skiing is. Some days you feel like you are in paradise, like no one can experience what you are living. But the other days sometimes it is really bad, it is really shitty, it is foggy, the snow is really bad, it is hard travel, impossible to ski, impossible to see, and avalanches and you don't know where you are going. That's why you have to wait for that special moment, and it comes two or three times a year. Last year we were in Chamonix with Hugo and we had a storm, like the biggest storm in fifty years. And we got there with perfect timing. The snow was so light and it was super stable, we were skiing something full throttle and throwing huge air. Those moments are very, very, special and you can't just go get it tomorrow. It has to be perfect timing or coincidence. You have to deal with the different elements of nature and the weather systems. Then there are those moments when 'boom the green light is on'. That is hard to beat. I am sure people have it in other sports in a different ways, but surfing is the closest one that deals with the nature, because for us you are just a tiny part, you are probably a solid thirty percent of what is happening. The biggest percentage is nature, she's the one deciding what is going on. You have to be a good skier to be at the level we are, but to experience that thing you don't need to be the best. You need to be smart and to communicate with the nature and the mountains to know when the

green light is there. Otherwise it will take you out, because it is so powerful. So that is why it takes years to know that tomorrow is the day. (Pierre-Yves Leblanc)

### *Pre-Performance Preparation*

Each athlete was asked to describe one of their best performances and one of their less than best performances and to discuss the differences between the two. Their pre-performance preparation phase was described as being an extremely important factor in having successful runs in BM freeskiing. Success elements in the pre-performance preparation phase included; drawing upon past experience, physical readiness, careful line selection/inspection, and clear visualization. Using these success elements raised the level of confidence the athletes had in their ability to perform successfully. It was very important for the athletes to then trust their preparation and remain calm. Each of these success elements identified as being important in the pre-performance phase is presented below with accompanying quotes.

#### *Drawing Upon Past Experience*

One of the most positive contributions of experience (with skiing since an early age, ski racing and skiing within this context) was that athletes could increase their confidence and comfort level with an unfamiliar situation by drawing parallels from memories accumulated from past experiences. This helped the athletes make good decisions before committing to a choice or to make quick adjustments while immersed in what they are doing.

All of the participants started alpine ski racing at a young age (average of six years old) and started skiing at an even younger age (average of three years old). The

early introduction to skiing and the desire to progress was one part of the path to gaining important experience.

I have been skiing since I was three so I'm comfortable in certain environments that most people aren't. I have raced (in alpine skiing) and I have constantly kept it up and I love it and I get so stoked on skiing that I want to do more and more and more. I am basically addicted. So when you ski so much you are going to progress to a certain level and you are going to be comfortable in certain situations, where other people aren't because they are not exposed to it as much.

(Jenn Ashton)

All athletes stated that their experience in racing helped them build fundamental technical skills, and mental skills such as focusing and imagery, that is required to be a successful competitive skier. This base of knowledge was expanded to allow these athletes to focus on other more advanced areas of their sport. For example, one athlete discussed his ability to "feel" the conditions of the snow, to know whether or not there is going to be an avalanche.

I am not (formally) educated in snow pack or all that stuff, but I can be skiing something and just by the feel of it and by the terrain and know that it is going to crack and when it is going to break, and I can pretty much pinpoint when with my weight when I am going to make it happen. (Jonny Law)

Another athlete discussed his ability to recognize from far away whether he could ski a line, ensuring that when he was dropped off by the helicopter at the top, his skills were proficient enough to ski the line. Hugo Harrison said, "Usually after a while you see

something and you know if you can ski it or not. From below, after you look at it for a while, usually you know that you can do it.”

With very solid physical and mental skills, and a vast memory bank of good and bad experiences, these athletes stressed the importance of continuing to learn from each experience, and to put themselves in unfavourable situations or challenging conditions in order to build more memories that will help them in future experiences.

I think you get good at big mountain freeskiing through trial and error and as you experience more things like big crashes and big cliffs, *you are able to apply that to what you are doing* [italics added]. A lot of things you end up doing, you have probably done something like it before. You just kind of process all of that, really thinking it over, so a lot of it is subconscious, it is almost instinctually. Like no problem, it just comes together. (Jonny Law)

That’s why you have to ski everyday so that you are used to skiing in every type of storm. So you start to feel. (Hugo Harrison)

The importance of drawing from experience is emphasized through examples of life threatening situations in which the athletes were able to draw upon previous experiences to be successful. Learning about what the athletes did before they acquired extensive experience in this context also provides powerful insight. In the following example, Mark Abma discusses his first experience with being dropped off on a peak by a helicopter. Generally the helicopter pilot cannot land on the snow, it hovers above the ground while athletes leave the comfort of the helicopter and step onto the peak. At that point they grab their skis from the cargo cage and then the helicopter takes off leaving them alone on the peak. Here is Mark’s account of the incident;

Oh my God it was such a junk show. I climb out, pull my skis out and I close the rack. It had some mechanism that you had to pull up, some sleeve so that the bracket could close and *I didn't know that* [italics added] and I was just like 'ah what is going on here'. And the pilot is just trying to hover you know. Meanwhile I am yanking on this thing, so that took a little while to figure out. And then when he takes off I am like fuck I don't have a backpack on. I left that in the helicopter. So that was my first drop off experience. (Mark Abma)

That experience was far from that of a prepared and experienced BM freeskiier but he was able to draw upon other success elements to ensure that he got down the hill safely and this situation turned out fine. However it could have been far worse if a gust of wind had swept towards Mark and the helicopter, or if he had encountered a problem during his run that required something from his backpack, which he left in the helicopter.

With BM freeskiing you end up in all these situations... that's where I think that you deal with different things, different falls, or different awesome lines or different days. It is just becoming familiar with something. (Jonny Law)

### *Physical Preparation*

There is no doubt that to be able to survive cliff drops of one hundred feet in height, or to ski thousands of vertical feet in seconds one must train physically to be strong enough to face those physical demands. In the open-ended interviews, all but two participants mentioned physical preparation as an important element of being successful as a BM freeskiier. This does not mean the other two did not feel it is important, they simply did not mention it. Physical preparation as mentioned by the athletes included; physical training to build muscular strength and cardiovascular fitness, a nutrition routine

that provides the body with enough energy to perform in their demanding environment, and getting adequate rest.

There are many benefits that come with being physically prepared to engage in a demanding sport, such as injury prevention, and having a clear mind heading into competition. One of the biggest benefits of being physically prepared mentioned by BM freeskiers was that it enhanced their confidence in their ability to ski well. Jonny Law said, “By being in the best shape I can be, being well prepared, you know on top of something, ‘I have done everything I can to be able to do this’.”

For this athlete, time spent engaged in physical preparation also provided an opportunity to work on focus and mental preparation.

I worked on my focus and I think working out (physically) was a big part of that.

Because like running I find it to be seriously meditation with the breathing and you do a lot of thinking, and I would think about skiing lines and faces and stuff.

(Jonny Law)

Wendy Fisher talks about the importance of physical preparation;

Anyone who has the desire to be an elite athlete knows that physical training goes hand in hand with that. I don't think any elite athlete made it to where they did without training. I don't think anyone would say, oh yeah I have never worked out a day in my life. Just because I am a skier, you know I don't ski myself into shape. Everyone who says, oh I am going to ski myself into shape, no way, you can't learn to take airs, you can't learn to ski really technical lines, and keep the leg strength all the way from top to bottom if you are not physically fit.

MA: And then take care of yourself. JC: In what sense? MA: Ah well let's say you do have a bit of an injury coming on take care of it don't just ignore it trying to be tough guy Tuesday, and ah if you feel like your body needs rest listen to it. Like I was feeling it a week ago, I was like "I am done", I finished my coaching job and I was out. And then I got the phone call and I was like alright I will do one last shoot and then sure enough I wound up getting hurt so maybe the next summer, I will listen to my body a little more carefully. (Mark Abma)

### *Line selection/inspection*

The line selection/inspection phase is of utmost importance to be successful as a BM freeskiier. The amount of preparation that takes place in choosing a line, prior to the performance, far exceeds the amount of time it takes to perform, as the average run usually takes just a couple of minutes. The importance of good line selection and inspection is immense considering that within those few minutes the athletes' life can be ended by not making a good choice. Good line selection/inspection does a number of things to the athlete, the most important of which is probably surviving the run. A good line selection also brings the skier back to the things that they love about BM freeskiing. When they look up at a mountain and see a line that they think they can do and enjoy, they are brought back to the memories of past experiences of joy while skiing.

Yeah sometimes I fly into a zone (in a helicopter) in the morning and I will see a line that I don't want to leave without doing it. And those times I just step right up and go on the first run. Because sometimes we have a perfect storm and we just fly out and we know that it is perfect. (Hugo Harrison)

Finding the right line or an enjoyable line increases the excitement athletes have towards performing that day, even if they were not that excited about being there in the first place. The right line selection also has a direct effect on the athletes' confidence and their trust in themselves and their ability to let it go.

When it is hard to find a line, it is hard to do well. In comps (competitions) that I did well in I would look at the venue and I picked a line instantly. You are just like 'oh check that out'. Maybe not instantly, but quickly. I remember in Kirkwood one year I was looking for a line, and all of a sudden this line just appeared and I was the only one to see it. And I was like, I could totally go there to there and it would be so easy. And it would look cool, and no one else really saw that line. And so of course I skied it and skied it well...And then a lot of times I will be close to the start time and I haven't figured out where I am going to go. And that is frustrating. (Jenn Ashton)

The following quote demonstrates the negative effects of not having a line selected, or not being able to fully inspect the line and be confident with what you are about to do.

In filming, it is a big thing (line selection), actually it is huge because sometimes I will go up and I will be like, I kind of like that line or I kind of like that line. "Are you ready Wendy" (from the film crew)? And I go up and I don't really have my line totally picked out. And I am a wreck when I am not one hundred percent sure of where I am going and if I don't have a Polaroid with me (a Polaroid picture of what is beyond the drop or ledge), it could be the most basic run and if I don't have a Polaroid I am a wreck. Because you get up to one of those peaks and you

can't see anything but the valley floor. And so I always feel that even though there might not be one obstacle on that run, I just feel, 'ooh I might be faked out or something'. I just have to have that Polaroid to know you have your out if it is going to slide, what is the best way to go, if the face (of the mountain) is going to go, which way am I going to go. And you can't see that anymore. But then when I am kind of wishy washy between two different lines or not a hundred percent, I am a complete wreck. I still go but it is probably going to suck. I mean they probably won't even use it in the film. You can see it in me (the way she skies) if I am not one hundred percent. (Wendy Fisher)

It is common for people who look at this sport from the outside to say that participants in high-risk alternative sports such as BM freeskiing are reckless and have a death wish. They may think that these athletes are people who don't care and don't think about what they are doing. They just "go for it". This outside perception is certainly not supported by these elite BM freeskiers. The external conditions that exist on performance day are the most influential component when selecting a line to ski and they choose that line with great care. The external conditions are studied in detail so that the athletes are as aware as possible of what exists on that day. The external reality of the mountain is then compared with the athletes' internal feelings about the level of risk they are willing to take that day, in order to find a balance between the two. Each athlete asks himself or herself; what does the mountain have to offer today? And what do I have to offer today? The goal is not to kill yourself. It is to complete the challenging run successfully. If the risk is deemed too high, the athlete will usually back off and wait for another day. Hugo Harrison said, "Sometimes it's filled in enough to do it (the line has

enough snow to make it), sometimes it is not. So each line has its moment.” And Jonny Law said, “I have a career to think about now too. So it (how much risk you are willing to take) changes as you grow, like maybe you love a girl. Things change and that is going to influence how you add up the risk.”

That’s why you choose your line by how you feel. You have to back off sometimes. The best way, is to respect the mountains. If you assume the risk of going out there, you are assuming the risk of avalanches, and they are set off by you or others. That’s the worst part about the skiing we do, you have to be conservative sometimes, go with the flow of the snow, more or less. (Seth Morrison)

Right, and I don’t want to do that. I am not looking to do that at all. I don’t really want to be death defying by any means. So it is kind of a new thing that I am definitely coming to grips with a little more. (Mikey Stevenson)

No, no, no, there is no way. You have to think about the bigger picture. There is a time and a place for everything. You just have to know when it is. I mean you can jump the biggest cliff you want as long as there is enough transition. You can do a two-hundred footer if you want. But dropping a ten footer to uphill is stupid.

(Ryan Oakden)

A couple of athletes shared their experience of selecting a challenge without adequate preparation. They both got away with their health however they were not happy with their decisions. Defying death by luck is not what they are seeking to do.

JL: I have made some massive mistakes like there are some things that I don’t even want to admit to. JC: Like what? JL: Well I will tell you one. My first year

competing I had done a few comps and fallen in each of them. JC: Because they were one hundred percent (selecting lines that were at the very top of his ability)?

JL: Right just a hundred percent. I would look at the venue and I wouldn't think what could I do, I would look for the gnarliest thing; I would say that is crazy, I am going to do it. And this one line in Kirkwood in the final at the top, massive cliff band a huge amount of exposure and I'd planned on doing something that I don't even think is doable. And as I am skiing towards it I realized that I had no idea where I am. Don't know where I am at all. And somehow I lost complete control over like any sort of thought process and I just picked a point and went for it. *And I am embarrassed by it, because it is the most reckless thing I had ever done.* And it ended up being the sickest thing I had ever done. (Jonny Law)

If you do something and it didn't work out how you planned and you still get away with it, *I don't get a buzz out of that I get the chills, like holy maybe I should sit down for a little bit and think about it for a while.* And I came close a couple of times and I always got the chills, sitting here now I am getting the chills. And it was like being close to death and you know you want to be close to death but know that she can't do any thing to you. Dancing with it, you are and that's how you are comfortable with death because you know she can't do anything to you. (Pierre-Yves Leblanc)

Wendy Fisher talked about being afraid, and what it does to her in terms of preparation.

There are times when I am like oh my God I am going to puke right now or shit my pants because I do not want to go down this....Once the heli (helicopter) leaves you are shaking for sure. You know if it is a nerve wracking run and it (the

helicopter) is going away and you are like oh fuck, especially if you are alone. It is like oh my gosh I am up here all alone and everyone else is on some other peak. That is really cool and scary at the same time. It is cool because you are, wow, I am over here alone about to ski this peak and it is all me and you feel alone.... Being scared is not a bad thing. It definitely makes me look for my line now and where my safe zones are.

Once athletes come to an agreement with the mountain on where they can ski, they then look to the risks that exist in the line. This is done during the initial inspection phase. This is where risk management comes into play. A debate ensues between risks and pleasure. If the risks outweigh the potential pleasure then they will not choose the line, and if the pleasure is greater than the risk, then they will proceed to inspect the line. The athletes point out that it is a tough debate sometimes. Thoughts of the intense joy from previous challenging runs may flood their mind. It takes self control, self-awareness, and perspective to choose a line that is challenging enough to be intense and joyful (keep in mind the challenge was one aspect that all the athletes love) but not beyond their skill level or that of any athlete. Pierre-Yves Leblanc said, "For me it's like finding a mountain that is appealing to you and finding the line that you have to ski. And it is all a mental discovery, and calculation of where can we ski on this mountain." And Ryan Oakden said, "I want to find something that will challenge me without killing me. It is a fine line."

Just look at the consequences, people call it calculated risk management. You know there is risk and you are calculating it. There is probably a mathematic, like you are figuring out this plus that and the weight of one thing compared to

another. You just calculate that risk, there is always going to be some level of it and if it is too high then it is not worth it. (Jonny Law)

I wanted to ski the line because of the joy I would feel from it, but the risks outweighed the joy. So I didn't ski it. I picked a line that was hard enough for me to enjoy. But you don't want to do something above your head. It was a line that I could ski no problem, and it was kind of tight in some areas. (Jenn Ashton)

MS: I am scared a lot but usually I can get passed it. You just have to decide what is being scared and what is being sensible or not sensible. JC: Or reckless?

MS: Yeah! Yeah! That is one thing that more and more I have had a hard time coming to grips with. I'll feel nervous and I am like, why am I feeling nervous? Should I do it? You know is it one of those times like when you were a kid where you might be scared to jump off of a high diving board, but you are going to be fine. You are just scared; you have to go passed it or recognize if I am scared because this is something totally stupid. I'll look for things too. Like this cliff, ok what can go wrong? What do I want to avoid? Ok avoid that, don't be right there. Are trees down there below? If I tumble where am I going to wind up? What's on the take off here? Stomp out the take off a bit. (Mikey Stevenson)

Once the athletes have chosen a line, the next step is to inspect it thoroughly.

Thorough line inspection increases the awareness they have with regard to the potential obstacles that exist in a line, as well as the "safe zones" or areas that might provide an "escape" route if something goes wrong or if it simply doesn't feel right.

That's what it comes down to with this focus and this visualization, you need to trust your inspection and trust yourself. You need to know that you inspected

well, otherwise how you are going to be confident up top and ski well and feel good about it. You are going to be worried and because you are worried you are not going to be skiing strong. So it all comes down to inspection, inspection is most important. (Jonny Law)

At times the athletes are fortunate enough to use a helicopter to inspect the line they wish to ski, however for the most part, inspection takes place at the bottom of the mountain. This poses a problem while picking directional landmarks during the inspection process. The athletes could select a rock while looking up at the mountain, however when the visual perspective switches and they are at the top of the mountain looking down, the rock could be covered with snow and confuse them potentially misleading them. Experienced athletes use visualization in an attempt to switch there perspective and see what the line might look like from above.

It can be bigger or you just miscalculated and you go to the wrong place. You know that bump of snow that you were looking at it from the bottom, you know that rock. But then you didn't see that upper bump of snow and so you arc around the first one and you are supposed to arc around the second one. Instead of going over a sixty footer you are going over a hundred footer (100 foot drop). Things like that are not because of the ego, it is because of the preparation...I am thinking about where is the snow, and how big is this really, because when you are looking from a kilometre away and then you have to anticipate or predict all those things, it is not like other sports where it is there and you can go touch it. If you want to go practice like ski jumping they want to make the same exact ski jump so wherever they go it is the same thing. But for us wherever we go it is a

whole different thing. You have never tried it before, and it is a big mental challenge trying to figure out what it is going to do and how big you are going to go and what is the inclination of this, and where is the good snow and looking from the bottom, and then when you get to the top you are blind. You have no idea where you are. But that is why it is so cool. It is a big mental game of trying to calculate everything. You are looking for a big buzz. You see things from down there but now you see completely different things from above. So you have to figure out what you were seeing from the bottom because it has this shape and then ok everything looks different so I have to go this way around this one and then this way around that one, and then it is going to be around twenty or fifty feet. Ok I've got this snow here and this snow there and that snow might be a little crusty because of the wind. It is a big like mental game. And kind of like anticipate and calculate, and then you drop in and then all of a sudden it switches.

(Pierre-Yves Leblanc)

Athletes indicated that there are a number of ways in which inspection takes place. As indicated by the athletes, the use of a helicopter is the best method of conducting effective inspection of a line. These vehicles can be flown a few meters above the line the athletes will ski, providing a sensation and visual opportunity to experience the line from the air.

Sometimes with the helicopter I go up and say, this is what I want to ski, so the helicopter goes like ten meters away from the snow and I go down my line. So if I am going to turn there and off this cliff, then I will go exactly there with the helicopter, and then I go up and ski it...Then at the same time if I am up there and

I get the helicopter to fly to a cliff and make some marks, so when I come to the cliff I see the mark and I know that that is where I want to come off. And I know exactly this is where I want to be. I have no idea where I am going, there is a huge roll, and I have no idea where I am, there are no features, but there is a mark in the snow, and so I trust that mark and I go that way and then I hit my air and I land in between my two rocks. (Pierre-Yves Leblanc)

For picking the lines the helicopter is the best. You can fly right over your line and look at stuff. A lot of the time with the sled (snow mobile) you have to come up the back and you are not sure what is on the front so you can't tell where you are going so the helicopter is the best. Yeah I go much bigger when I go with helicopter skiing, I can just scope more where I am going. (Hugo Harrison)

On the other end of the spectrum, the worst way of inspecting a line is with no inspection at all. Mikey Stevenson explains his mentality towards being led blind off of something. You can tell that he is hesitant in trusting just anyone and would prefer to see it himself.

By the right person I could be led blind off a cliff. JC: Really? MS: The right person who knows my skiing, and who knows skiing (in general) that well. There could be some guy who could be the best skier in the world but I might not trust him to do that. A good buddy that I skied with a lot (I would), a guy like Hugo I would trust that guy, if he told me exactly (where to go), he just knows so much (about skiing), it is a science for him. I would trust him for sure. And I have before. (Mikey Stevenson)

It was not uncommon for athletes to line up a landmark such as a tree, or a rock that is on their line, with an object in the distance such as a mountain top on the horizon. This technique was said to be very valuable for providing directional information while immersed in the line. The importance of good inspection was discussed at great length by the athletes. The following quote shows what one athlete did when he could not thoroughly inspect from up close and illustrates how he selected an appropriate line and inspected it enough to be confident with his line decision.

This was after Snowbird, the same season and I go there (to France) ranked fourth place in the world tour at the time. And we get to the venue and it was awesome. We had a ton of snow, there were cliff bands, there were some steep zones, it was just awesome. And then we were told that we couldn't inspect (by walking around features and checking the depth of snow in certain landing areas). We had to inspect from afar with binoculars. The tram (device to transport skiers to the top of the mountain) kind of went up on top like lookers left (left hand side if you were looking at the mountain from below) so you could kind of see stuff. But it was still a long distance and who knows with depth perception and the host country competitors had all skied it of course. JC: Do you think that is part of why they did it? JL: It is hard to say but I am really glad they did. I think it really separates the weak from the strong and the good from the great. And it was intense. JC: So what did you do? JL: Inspection how did I do it? I did it with binoculars, straight up with binoculars. And actually I took a picture of a picture with a digital camera, I was able to zoom in on stuff. But still it wasn't able to give you specific details of the line, like what if there was shrapnel (chunks of

snow, small rocks etc) on the take off and stuff like that. I pretty much came up with a game plan. Like my last cliff, it was probably a good forty, forty-five footer, but it was like a big band with rocks outcropping rocks on either side. And if I didn't have that angle right I would have landed on rocks which would have been really bad. So what I was able to do, because the face (of the mountain) was fall line (same angle) with a cat track (an easy path on the mountain created by an employee of the resort by using a snow machine). I was able to sit on the cat track with the cliff I wanted to hit and my landing lined up, I turned around, looked past myself to find a landmark that would work with that take off. So I used the same technique as I would have if I was on top of it, but from below. I remember it was very stressful because I was in France, I was never there before, first time competing here, first time skiing there. (Jonny Law) (This turned out to be one of Jonny Law's best runs ever, refer to appendix B for a detailed account of this event)

The environment in which BM freeskiers perform is unpredictable and dangerous. A key success element athletes mentioned when choosing and inspecting a line is to remain humble. As soon as athletes' ego rises too high, they risk making poor decisions by choosing a line that they are not capable of skiing. The mountains are far too powerful to be egotistical; they can flick you off in a second.

I look at the mountain and I am saying I am going to do one turn there and one turn there, I am going to hit this cliff here and land there, one turn there and then I am going to straight-line to the bottom. The ego comes in and says I am going to hit the bigger part of the cliff instead of the smaller, and then coming in the first

turn and then the second turn you planned. And then coming towards the cliff and you are like 'oh fuck why did I choose this'. That's when your ego comes into play. You make your plan, you can plan something that your body can't handle if your ego or mind is too strong....Yeah so being humble and being smart and being really aware of everything around you is very important. The second you are not watching you can get in trouble, let's say you know you are getting excited over something, you forget a couple elements, don't calculate a couple things like what is the sluff going to do here or there, or there is a little rock under the snow that you didn't see. You just look at it quick and you forget to calculate something that is so dangerous, that is the same as not being humble. (Pierre-Yves Leblanc)

These elite athletes possess an immense awareness of both their external and internal environments. This is illustrated through the pre-performance preparation that helped them survive being caught in one of the most dangerous events in the mountains- the avalanche.

While inspecting from above I looked at my line and I said well if I get caught in it I've got to make sure that I go right because there are no rocks below there and it will be fine. And if I do get caught going left then there are rocks there and that could be bad. So I had this plan that I already knew that I was possibly going to be taken out. My chances (of being taken out) are high but there are no rocks so my chances are high again to be ok. And that was my mentality, and I was going to go for it. (Wendy Fisher)

It was the same sort of (avalanche) situation where I am skiing down, I knew it was going to crack on the same face. One guy went crack, another guy went

crack, and now it is my turn. You know it was ok, you take things into account. You think ok, it is new snow, it is light. This is the type of things you think about. Sure we are in some unstable conditions but as a professional you can deal with it. It is light enough that it is not really, really going to get you down or break your bones while you are in it.... Yeah basically it is nothing new. You keep in mind that there is a crew around watching, it is not like you are alone in the backcountry. You know you are going to be saved if you get buried, and you know you are not working in an area that all funnels into crevasses. So you keep all this positive stuff in mind, like sure it is going to avalanche and you might fall on rocks, you might get buried. But there are a lot of positive things you can think of. It is like a scale, like don't get me wrong I turn away from stuff a lot. I say out loud to myself, it is not worth it. I will say it out loud and turn around and get out of that. (Jonny Law)

I have had runs where there have been avalanches to ski off of and then take a drop to get out of the way at straight line speed to save your life. Knowing where you are going is really all I need to know. (Seth Morrison)

### *Visualization*

With a line picked and inspected, all these athletes talked about visualizing how they would like to ski the line. All the athletes stated that the images in their head were from the point of view of their own eyes. With regard to the importance of visualization, one athlete simply stated; "If you can see it in your head then you can do it." (Jenn Ashton). Visualization was a success element that the participants took very seriously. One athlete stated that he visualizes as often as he can. He found that while he is running

is a great opportunity to practice his visualization by imagining himself skiing lines. One of the important aspects of being able to visualize effectively (and thus a reason why they practice it so often) was that it provided the athletes an opportunity to get a turn count (the amount of turns they will make throughout the run) and an idea of what their run would feel like. Keep in mind that the majority of the time the athletes ski a difficult line, and each time they do it on that mountain in those conditions it is for the first time. There is no means of practicing the line you are going to run before you actually do it, other than through visualization.

It really comes down to visualization, once you pick your line. I go through it in my head before-hand, doing the visualization. Visualizing the run...I would walk away for a little while and visualize my runs for a bit... through my own eyes. I can see my ski tips and I can almost time my airs in my mind, I can know how long I will be in the air. A lot of the times it will come down to inspection, you need to be able to trust your inspection. JC: And so how do you inspect well? Is that something you have learned? JL: I think so, I think ski racing helped like skiing through every gate and do the hand movement through the gate.

JC: Do you still to that? JL: Yeah you will see me up there doing like prere, siddi, poo (skiing sounds), like you will even hear sound effects. You just take your time, you line stuff up. If I was to just focus on the cliff drops that wouldn't be enough, you have to almost imagine how many turns are going to be in-between each cliff drop and what you concentrate on certain landmarks. (Jonny Law)

You are not even close to where it is, you are in bed or something and you are starting to get super nervous. My brother raced, he is older than me, we used to

watch world cup races and mimic what they were doing. So looking back I was probably visualizing when I was really small... I had visualized it so much, (executing a specific cliff drop) for like two years I visualized it and I was nervous real nervous as I was visualizing it. And then the night before and I wasn't getting nervous any more. And it was a weird kind of feeling. (Jenn Ashton)

Some athletes mentioned that after they have selected and inspected a line, and visualized how they want to ski, they simply commit to the line one hundred percent.

### *Confidence*

Confidence is a powerful and interesting success element. For these athletes, their level of confidence appears to be an indicator of how prepared they are. If they have prepared fully and effectively, they *will* be confident (almost always). If they are lacking confidence, than often they must go back to the preparation phase and make some refinements or changes. Having confidence in their equipment is also very important because they do not want to be worried about their skis while performing in a dangerous environment. If there is a problem with their equipment, they must assess their equipment, decide what is not quite right and make adjustments so that they can trust it.

One athlete spoke about raising her confidence level by skiing areas of the mountain that she knows she can ski easily to enjoy the movement and get back to her flow. Another athlete talked about focusing on where she is going and where her safe zones are to raise her confidence. Many of these athletes said that knowing where they were going down the mountain raised the level of their confidence far more than thinking

about how good a skier they are. Focusing on a good line is what will actually get them down the hill safely.

In a no fall zone (if you fall in these zones the consequences are extreme) your confidence goes down because of that, but you have to convince yourself to bring it up because you are fighting it in your head. It is a hundred percent manoeuvre. It is the mental strength that carries you until your confidence is at a certain level. I don't think you are going to ski at a level to perform there. So if I am not able to get my level of confidence there that's when I say it is not worth it. (Jonny Law)

It is a confidence thing. If I know that I can rule that line then I am going to rule that line. But if I am like, oh man I don't know if I can do this, then you are going to get a little nervous. *But if you know that, oh I can't wait to do this, it is going to be so fun* [italics added]. And you are going to rule it, and I wouldn't be nervous, I would just be like, ah is it my turn yet? (Jenn Ashton)

Something does go wrong when I am not one hundred percent confident on something. I am hesitant or cautious or I bobble. And then when I go up there, even if I am scared, if I know one hundred percent where I am going, or think I know where I am going, then I am good to go. Even though I am scared, that definitely makes a huge difference in feeling that you are one-hundred, like you are dialled. Or you think you are dialled. That definitely makes a huge difference. (Wendy Fisher)

Hugo Harrison showed immense confidence in his ability to prepare effectively for the lines he chooses to ski. "For me it is almost impossible [to get hurt or to die] because I am so good about it (preparing), I can guarantee that I will do it."

*Trust*

The challenge inherent in BM freeskiing is one of the elements the participants love the most. They enjoy pushing themselves out of their comfort zone to overcome obstacles and innovating along the way. When they step out of their comfort zone, the level of uncertainty increases, sometimes to the point that it is impossible to be 100% confident in their ability to be successful. At this point, the athletes discussed the importance of trust. Being able to trust their preparation, trust in knowing the line where they are going, trust what they are going to do, and trust their abilities (and experience) to be successful. Mikey Stevenson said, “You have got to get to the point where you are going to trust yourself....If you can’t trust yourself in that kind of forum then you can’t be there.”

When you are sure about what you saw (in inspection), you can trust yourself a lot on the top, trust in how you can do it. Because if you don’t trust yourself, then you will be hesitating and that’s when you crash. So it is a lot of believing in yourself and the line you selected. (Hugo Harrison)

Trust yourself for what you did look at, that it was the right line because otherwise as soon as you get to every rollover you will stop and check it out. And you have to trust that you studied the line well enough. That is basically it. (Mark Abma)

*Remain Calm*

In the final minutes of the pre-performance preparation phase, the athletes have done virtually everything they can do to ensure their readiness to execute their performance. Just before pushing off the cliff or down the mountain, the final readiness focus prior to starting the execution phase is for the athletes to get themselves in a state of

arousal that will match the task at hand. For these elite BM freeskiers, it is essential to enter a state of calmness.

There is so much mental and physical tension when preparing for a BM freeskiing performance, and the consequences of failure are so high (death) that it is quite easy to become too stressed or focus on the wrong things at the top. The importance of remaining calm before their run was mentioned by every athlete and felt to be essential for a successful experience.

JL: You have to be able to stay really calm even though what you are doing is very important. So you need to break it down and try not to worry about anybody else. JC: How do you do that? Stay calm and not worry about anybody else? JL: I just try to separate myself from the situation. Like I am not there to try to meet people, I am there to ski my best. And if I ski my best then who knows what will happen....Actually the year that I was best, I don't think I watched anybody else, so it was a total separation. I would hear this and that but I wouldn't think about it. Ah buddy did this, buddy did that, I wouldn't allow it to get in. I would hear it and then just keep concentrating on what I wanted to do. I would just get away from all the excitement for a bit. And a lot of times if someone else isn't as calm as you, and they are getting all pumped, that can influence you. It can happen while you are waiting. You have to be strong enough to stay with your plan of action. I think it is good to pull away, do your own thing, just don't get influenced by the energy that is out there. So I never buddy up with anyone up there. (Jonny Law)

Most of the comps that I have done really well I have been super calm. And I think it freaks some of the other competitors out, like the other girls, they can see it. Other girls have told me that they can see when I am going to do well. When I win a comp I usually have that feeling that I am going to win the comp. (Jenn Ashton)

One of the benefits of remaining calm is that it helps prevent over thinking the run, where one can think about certain aspects of what they are going to do to the point that it starts to decrease their level of confidence in themselves. If the athletes maintain their composure and level of calmness, they can then trust their preparation and free themselves to do what they are capable of doing.

I just relaxed and the three people had gone and they were like ok Jonny are you ready? And at that point I allow myself to start to get psyched up, not like aggressive or anything like that. I just allow myself to become ready, to do what I want to do... The snow conditions are going to change but if you allow the build-up process to begin too early you might end up getting too anxious before your run, maybe thinking about things that could go wrong. (Jonny Law)

I just try to be as calm as possible. I try to think about it in the right ways, that it is not going to drive you crazy and at the same time you will be able to remember where you are going to go. (Ryan Oakden)

Sometimes if I am up there (at the top of the mountain) too long I just throw my head way out. Because you can't over think the shit, like what happens here or what happens if I do this. You just have to have your goal and know where to go. (Mark Abma)

One athlete raised an interesting concept about the difference between being in an ideal state of calm-confident and a not so ideal state of calm-nervous. He found that sometimes when he calmed himself and realized that he wasn't confident in his preparation, he felt weak. To overcome this weakness he then pumped up his state of activation to feel strong again.

This year I tried to calm down a bit. But sometimes if I am calm but nervous I just feel weak. It's a bad nervousness, so if I am feeling that I always try to turn that around to be like an amped up nervousness. I can do that to myself. So I am kind of on either side of the coin. It sounds weird but whatever feeling I just have to go with it or work with it. (Mikey Stevenson)

There were four main areas that the participants identified that helped them achieve and maintain their desired state of calmness. The first was the time that they arrived at the competition venue. All but one participant mentioned that they felt calmer when they arrived early at the competition venue with enough time (as determined by themselves) to prepare. The one outlier participant shared examples of competitions where he actually missed his start time, but was allowed to ski immediately to fill the void. This immediate start time prevented him from over thinking his run at the top. An important thing to note is that in each of those situations the athlete had completed his pre-performance preparation and trusted what his was going to do. He was aware that all he needed to do was to stay calm and do what he had planned to do.

The other methods of achieving and maintaining a state of calmness centered on focusing on their breathing, and using distraction control techniques such as focusing on positive thoughts or images and positive self talk.

It leaves (nervousness/ sickness in his stomach) once I get on snow almost immediately. I'll be on the gondola with some guys and I'll be quiet just focusing on my breathing trying to calm down. (Jonny Law)

When we think about fear, we often think about physiological responses such as increased heart rate, sweating, trembling, basically being in an extremely anxious state. We rarely think about calmness, tranquility, and silence. Many of these athletes shared examples of experiencing a state of calmness unmatched by anything previously experienced in their life, while immersed in some of the scariest situations they had ever faced. Mikey Stevenson said, "The biggest scariest thing I have ever done was this year and it was the most calm I have ever been."

Usually if I am prepared to do it, I am calm about it. And if I am not prepared to do it then, then I start to get super nervous. A lot of times for the biggest things that I have done, I have been super calm. (Jenn Ashton)

It is just little things that you have to be calm with. That's why the people doing the most risky things, the scariest things are the people that are calm, so calm.

And Hugo is even calmer...I am never scared or nervous when I am prepared.

The second I am scared I have to go back into the helicopter and do some more preparation. When I get to the top and I am not scared, that's when I know it is going to go down. JC: So when you ski a line you are pretty much stoked on it one hundred percent. PY: If I am not stoked on it, then I won't do it....There is too much to lose. You can't be reckless or you will end up in the hospital. And I have ended up in the hospital, always because I was never stoked and I missed the

preparation. Not because I was scared but because I thought I was invincible.

(Pierre-Yves Leblanc)

### *Performance Execution*

With an immense amount of mental and physical preparation invested in the pre-performance phase of a BM freeskiing performance, it is then time to focus on actually performing the run. Going from a stopped position at the top of a two-thousand foot chute, to exploding into action begins the transition from readiness, to releasing it into action. The athletes spoke about the feeling of releasing or channelling energy and how with each good turn, or manoeuvre, their confidence grew stronger. One of the most gratifying or feeling moments described by the participants was having the confidence to perform the first turn. An intense focus in the moment was the main element cited as the most critical factor for being successful while skiing. This included the ability to refocus when obstacles presented themselves. Each BM freeskiing performance is filled with moments where split second decisions must be made. The athletes said that during great runs, their decisions seem to be made automatically or at a sub-conscious level. During less than best performances, (and some runs where an unexpected obstacle was faced), the decisions were made consciously, within a state of “hyper-awareness” as one athlete put it. The following quotes discuss the success elements that are used by the athletes during the performance execution phase of BM freeskiing.

#### *Confidence during the performance*

A huge amount of confidence is needed to go from standing on the peak of a mountain to actually skiing down its side. The athletes said that it was their preparation that provided them with the confidence to leave the “comforts” of the peak. As soon as

the athletes made their first turn they said the release began, and with each good turn their confidence grew stronger. So confidence is important before the run begins and during the run itself.

Confidence is huge. Because that first turn, if you are a little bit tentative you are going to just wash out. That first turn you don't know what the snow is going to be like. So you have to be soft and supple, and also have that edge. So you get that first turn and it is like, all right now you can start going. And usually as soon as I drop in (making the first turn of the run) then I have no worries you know. It is just standing at the top that is the hard part. (Mark Abma)

It is that very first turn. Because you can't see anything, and that first turn, you push off, and you make that first turn. And usually after that first turn, it rolls over and you see it all. And it is like aaaah, oh my God, cool. When that reality hits, ok here I am, and sweet, I can see everything...that is a huge change in mental and physical relief. Just making that first turn. Just being able to be, now you are on it.

This is what is on your plate, now go where you can with it. (Wendy Fisher)

A cautious approach to the initial part of each run was employed by most of the athletes. Hugo Harrison was the only athlete who had a different mentality. He said that he liked to scare himself at the beginning of each run by going straight. His reasons for this are explained in the following quote. He also mentions that how you start the run usually affects how the rest of the run unfolds.

Usually I try to go really fast and scare myself at the beginning. To bring the adrenaline so I don't feel the legs burning. I always try to have something good at the top. Stomp it and be very confident. Sometimes it might be 'Oooh that was

close', but usually when you almost fall, or have a bad turn, the rest of the run can be affected a lot (in a positive way). Because when you stomp (execute a manoeuvre successfully) something very good and scare yourself, your confidence builds up. And confidence is the main thing. When that confidence is high at the top of the run, it will usually go good for the rest of the run. And when the confidence gets knocked out right away then it usually knocks you out for the rest of the run. (Hugo Harrison)

### *Execution Focus*

During the execution of a good run, the athletes' focus is centered on relevant stimuli and the task at hand and nothing else. The preparation elements on which the athletes focused during the pre-performance phase such as identifying obstacles and picking safe-zones are stored in their memory and are not consciously focused on during the run. The information stored from the preparation phase is available to call up if something goes wrong. The execution focus is totally riveted to the task at hand. Seth Morrison said, "While skiing down it's just you. You forget about all your worries and focus on your run." And Wendy Fisher said, "After my first few turns, I get into my run then. I just focus on my run. With the eyeballs on the back of my head to make sure that nothing is coming down after me."

After you actually start, a lot of stuff goes away including a lot of the bad feelings. Because at that moment you are more intent on what you are doing. You can't be worried about what is going to happen, you have to be focused on what is happening. If your head is somewhere else you could fall over making your first turn right, and roll down the whole line if you are thinking about something else.

So as soon as I am making that first turn I am thinking about what I am doing.

And that is when the game really starts... And then you are ripping and it takes a lot off my mind, as soon as I start doing that. It becomes a lot more fun then even if it is more intense. I am skiing. That's the thing, I am skiing now. (Mikey Stevenson)

### *Refocus*

It is inevitable that not every run is going to go exactly as planned. Each athlete mentioned times when their focus was disturbed or not in the right place and the effects it had on their performances. All of the athletes agreed that if their focus was thrown off and they could not refocus, their performance would suffer. The degree to which their performance suffered depended on the extent of the distraction and their ability to regain composure quickly.

During the moments of spontaneity or sudden extreme challenges, you stay focused on the task at hand, which is now plan B (because something unexpected has occurred). You have one choice and you have to go with it. If something goes wrong, you look for your nearest exit point (that was identified in the inspection phase of the pre-performance preparation). Getting away from an avalanche is tough, recovering from a crash off a drop, is hard to manage as well. That's why (you have a plan B or exit plan) and you choose your line by how you feel. (Seth Morrison)

JC: So if there is a run that you are going down and you hit a shark (an unexpected object underneath the snow) or something that you can't plan for, how do you refocus? MS: I have to make a big point of it. And try to pick up a ball of

yarn quick, before everything unravels... For example, I skied one line great at one comp (competition) but that day was postponed due to weather. And so it went to the next day and we all skied again. And the line that I skied perfect I got snagged right above my first cliff. So it sucked, I lost points and I was just like "Oh no!" I can't believe this happened!" JC: Are you actually thinking this as it is happening? MS: Yes! As it was happening. And then it was, get out of there as fast as you can, and you are just trying to get things back together as best as you can. (Mikey Stevenson)

It all happens so fast that you just concentrate on getting your balance, and getting your edge to a point that you can ski. I just think of getting back in that athletic stance, bring your ski back around or whatever it is. Sometimes there is nothing you can do. And you just eat it. (Ryan Oakden)

I might be 'oh fuck' but the next turn is good again and you just have to keep going with the flow of that good turn. It is like 'oops oh well I kind of hit that rock', but you just keep going. In skiing you don't have time; you just have to keep going. You have other issues to deal with rather than stopping and dwelling on it. It is totally a different mentality. Unless it just totally wipes you out, there is no reason to dwell on it. (Wendy Fisher)

*Doing without thinking (sub-conscious thought)*

A BM freeskiing run is full of moments where split second decisions must be made to ensure success. With intensive relevant preparation and a good focus during the run, an athlete seems to enter a state where these split second decisions are being decided

and acted upon at the subconscious level. Most of the athletes said that when they are skiing well, they enter a mental state where it seems like they are not thinking at all.

The biggest thing, once you start skiing, is that your head is clear. You know what is going on, it is just happening....Everything is moving pretty quick usually. Once you start skiing down, you don't have to think about anything. It is pretty incredible really, full on, just instincts...I don't hear anything, sight is just on key (relevant things), and just your feet, your body are all totally aware and working together. You don't have to think about moving any part of your body.

(Mark Abma)

JC: The example of your focus in France is so amazing because just before you were going to go there was a helicopter hovering above your head and you didn't hear it. JL: Well the interesting thing about that was that it was there and super loud and my heart was pumping, and the second he (the starter) said "go", the helicopter turned off. As far as I was concerned the helicopter wasn't there I couldn't hear it, it was just gone. It was just like in alpine ski racing, I would never hear cheering, I would never hear the cow bell, you just go until you are done. (Jonny Law)

Some of the more experienced and more accomplished athletes enter this doing without thinking state quite on a regular basis, for others it only happens some of the time. Wendy Fisher said, "My instinct just took over and when I let my mind be when I was skiing, I had my best performances."

I wasn't thinking of anything, it was just reflex. It is all reflex. I don't have the impression that I am thinking at all. As soon as you drop in (initiate skiing the

line) you stop thinking. You think about your first big stunt and once you are close to it you are just so concentrated on what you need to do that you forget everything else. I start thinking again when I am at the bottom. (Hugo Harrison)

One thing that is consistent for all the participants is that this doing without thinking, running on auto-pilot or letting your body lead occurred *only* during good runs.

Everything just goes as planned. It is like you don't have to think. You just go.

You go to the exact right spots, you land in the exact right spots, and you just ski to the bottom and that is that. That's how it is when it is a good run. (Ryan

Oakden)

### *Conscious thought*

Contrary to the subconscious decision making process, and what occurs most often, is making decisions at the conscious level. This conscious decision making process occurs whenever something happens that was not prepared for or calculated such as making a turn at an unforeseen or wrong landmark. Or something for which it would be quite difficult to prepare that surprises the athlete such as a hidden rock or an avalanche. Mark Abma said, "There is that moment that everything is going well and you don't have to think, and then as soon as shit hits the fan, you are in turbo alert."

JC: If you are skiing and you hit something in your run that throws you off, how do you refocus after that? HH: That is when you think. When something like that happens, you have a moment to think. I usually try to stabilize myself and just go with the flow. Sometimes the line doesn't go exactly as planned but it still works out. In the actual moment you think a little bit more when you hit something that was not planned. (Hugo Harrison)

Whatever sparks the conscious decision making process during a run, the reaction is consistent according to these participants. First a state of surprise and alarm is felt, which only lasts for a very brief moment, and then they shift focus to the next thing they are going to do.

You are always thinking 'oh shit' at first and then, 'now I need to land this'.

It is not panic for very long; you revert to thinking about how to land perfectly.

You are going to do what it takes to get hurt the least amount as possible. (Ryan Oakden)

Your attention and your energy goes to this moment and you can't be scared because you are just dealing with what you have to deal with now. You just have to focus on 'ok I have an edge on my ski, fight it' and that's what you do. (Wendy Fisher)

These athletes said they rely on what they called their "instinct". This instinct has been honed from years of experience to quickly identify a possible solution to various issues.

Going from the point when things are working well to the point where shit goes wrong. It is just like your first instinct, you just have to go with it. You see an option and then you go with it. And then from there it is commitment again.

(Mark Abma)

So I pointed it off and ended up drifting left. And I am eighty feet up and there is a big rock that I am going to hit. I am going to land on a big frigin rock. And you know if you have a cliff like that, you have some time. And I thought, this is going to break me badly. But you do what you can to make a bad situation

dealable, and I just kept it really tight. And then at the very last second I leaned over and I kicked off the rock. I was somehow able to measure the angle of the rock and I kicked off of it with both skis at the same time with the same amount of pressure on each foot and my pole, and I blew both my skis apart in exactly the same way. And I think that if I'd taken more of that hit with one leg instead of the other I probably would have broken that leg. I broke my pole within the handle and my wrist was sore from that. And I was fine and again being able to just deal with the situation. (Jonny Law)

Basically I was the third person to go down and there were five of us. There were two people above me and two people below me, which is kind of secure. And so I skied down and I did two turns and then my second turn I felt it go (an avalanche) and I looked on either side and it's like twenty feet on either side of me, and I got pushed on my ass and I was able to push myself back on my feet and straight line the whole thing. And you are just like wooh, and then boom onto smooth snow. I just out ran it. I just went straight down it and out of it. The heart was pumping but the guys I was with were way more nervous for me... You have to do what you have to do. And that is what my instinct told me to do, I mean how much time do you have to think and yet you have to make a split decision in an instant, it is instinct for sure. (Jenn Ashton)

The final thing these athletes do in compromised situations where conscious decision making is taking place is to remain calm. This is especially essential in situations such as an avalanche or airing over a cliff, when the consequences are severe and time is of the essence.

JC: What was going through your head when you came over the edge of the cliff and you realized that you are ten degrees off and you are going to land on rock now? PY: I just said, *ok this is going to have to be the best landing I have ever done in my whole life* [italics added]. The smoothest I am going to land, so smooth, so perfect, I can't just jam my feet into the sharp rock and I sort of dove. (Pierre-Yves Leblanc)

I have been caught in a few (avalanches) and the funny thing is the few that I have been caught in, I have been as calm as can be. And you are like, wow this is the thing that I am the most terrified of. And the two that I was definitely in one, you just have to deal with it. And you deal with the moment and it is not that scary. I don't think I thought of swimming, but I definitely would feel myself hit the ground and I would try to dig into the ground, or grab the ground. And then you get flighty again, and you are kind of floating with the snow. And I remember getting snow in my mouth and I was like, oh my God cover your mouth. And so I would go through this motion of covering my mouth and then when I hit the ground, I would fight and then cover my mouth. And I would go through these things until I felt my legs, like a layer of it was slowing down... And at that point I was like, put up your hand and cover your mouth. And I was fully prepared to make that pocket and have my hand in the air. (Wendy Fisher)

I was coming into one of my features that I wanted to jump off of, I wasn't completely sure if I had it right and luckily I had an exit strategy if it didn't look right. Basically I had everything going, I had exit strategies that if I was skiing up to something that I wanted to do and found out that I couldn't or I wasn't sure of,

I would have a way to keep it fluid and to get out. So I am skiing up to it and I was trying to gauge my level of confidence basically. How you are feeling physically, as well as mentally. JC: This is during the run? JL: This is during the run, and you are skiing and it was wicked powder, and ski up to it and for a split second I wasn't feeling right about sending it off this cliff. So I was able to turn around and kept it fluid, but you've got to be really in tune with how you feel about what you are doing. You don't just want to send it (over the cliff) because you are in a comp, and I have made mistakes like that in previous comps. You have to relax and it is not worth to kill yourself with this stuff. (Jonny Law)

They feel they are able to do this because of their experience and honed instinct for skiing in the big mountain setting and also because of the reflection they do in the post-performance phase.

### *Post-Performance Reflection and Learning*

The post-performance phase is the final phase in a BM freeskiing performance. This phase is linked to future successful performances when the athletes take the lessons they have learned during the performance and transfer them into knowledge that they can use for future experiences. The main element that enables the athletes to acquire this knowledge is conscious reflection upon their experience. By consciously reflecting on their experiences, the athletes are able to draw out many lessons, and think about how to apply them to future experiences. The identification and application of lessons learned appears to lead to the development of a mindset that the athletes carry with them into skiing and a number of areas of life. The following quotes present specific details on how

they use the post-performance phase to breed future successful performances in BM freeskiing.

### *Reflection*

Reflecting upon one's run is something that each athlete did shortly after they finished their performance. This reflection process seemed to occur quite naturally for the athletes. Some seemed to be drawn to reflecting on what they had done due to the amount of effort they put into something that was very much life threatening.

After I come to the finish line it usually takes a while to allow myself to come down from what I have just done. Your eyes are just (unexplainable), your heart is pounding and you are shaking. And I put my head down, and this is what I usually do at the end of competitions before I talk to anybody. I stop and I go through what I had just done, I visualize what I did. I visualized what I just did and try to compare it to what I visualized before I had done it. It is a bit of some sort of closure, because you really give a lot of yourself, it is life or death basically. It is not going out there and swinging a bat. You are controlling a day in your life that could turn out so wrong. I remember getting to the bottom, head down, poles in my armpits you know, just relaxed, get my heart rate down and visualizing the run that I had just done. (Jonny Law)

If you do something and it didn't work out how you planned and you still get away with it, I don't get a buzz out of that. I get the chills, like maybe *I should sit down for a little bit and think about it for a while* [italics added]. (Pierre-Yves Leblanc)

Some athletes carry this reflection process into other larger scopes of their lives such as family.

My brother died skiing a long time ago at Squaw and I wanted to go and just reflect on his whole giving me the love of the sport. It was because of him that I started skiing. So you know I didn't just want to dump it, there was this passion that I wanted to resolve some issues so I ended up in Crested Butte and that's when I got talked into doing the contest... And I would think back to when I was at Squaw about how much fun skiing used to be. And where did that fun go? And why wasn't it fun anymore. (Wendy Fisher)

The reflection process was felt to be important in the progression of one's skill. Jenn Ashton and Jonny Law discussed the use of video information to analyze situations that didn't go as planned to avoid making similar mistakes in the future.

Well basically I was surprised I had hit the rock. You can see the video *and I have watched it over and over to see what happened* [italics added] and you don't see any rocks. JC: Really just smooth snow? JA: Just nice smooth snow. Just smooth powder. And because I aired onto the shelf that's why I went through enough to snag the rock, and you can see the rock after me. (Jenn Ashton)

I know now how to be better prepared for it now just through seeing myself on film and listening to the people I ski with. Like when Will Burkes hits cliffs he just points it and his hands are just there holding on without moving. There might be a little bit of movement in the end but it is just like POW! (powerful athletic stance when landing). (Jonny Law)

At the end of our interview for this study, Ryan Oakden surprised me by making the following statement: “This definitely helped just having the conversation. I need to go and think about the conversation a bit.” It did not surprise my supervisor because his experience has shown that “great performers try to pull lessons out of every relevant experience.”

### *Lessons Learned*

Each athlete discussed many lessons that they have learned through BM freeskiing. The lessons learned came from a variety of areas within skiing.

#### *Lessons from the mountains.*

I learned that you can't lie; you can't hide anything in the mountains. You have to be true to yourself, and it gives you an image of who you are. I have learned to bring that into the real world. The real world is not like the mountains, though you can play games and pretend you are someone who you are not. The world is all about talk and how you can sell yourself but that doesn't mean that it is true. But in the mountains there is none of that. It is all real, you cannot pretend in the mountains. So I try to bring that into the real world, I don't play games with people, I don't play games with anybody. What you give is what you get. Like things are more grounded, honest people. But it is hard for me to work within this society though. It is so hard if the people don't know me, they will take advantage of me right away. Because I am not there to be the asshole and play games with them. And sometimes when you tell me something I will believe you, because I am never going to talk shit. People who know me don't do that to me because they know that they can't hide everything. We are who we are, it doesn't matter

what you are wearing. It is your aura, your energy, that's who you are, that is not hiding anything. And then you come to the city and think that is why I have learned to be like that. (Pierre-Yves Leblanc)

*Lessons from competition.*

I do kind of care but I don't know it's a deep personal learning experience skiing comps and I have learned a lot and I know now what judges are looking for and what I can ski. Yeah it is definitely a learning experience skiing in comps (from that perspective) because there is definitely ways that they judge things and it is good. It is just about crossing the line for me. It is crossing the line, and if you have a good run, then there is no better feeling, crossing the line, it is elation. Because it is done and done well and you are like, yeah! Everything you put into that all year those comp runs that you are going to ski. And that's why it means so much. It is too bad that it is not more enjoyable for me during, but you would probably be pretty hard pressed to find someone tell you that a competition run is pretty enjoyable while it is happening. But I am sure that when those guys are riding Jaws (one of the biggest waves on the planet) in Maui or something you know they are probably not dropping into it thinking, oh this is just a peach. Right? (Mikey Stevenson)

I learned the less I think about during the run, the better. I think back to my racing career and to my best races, and it was the races where I was having fun, not thinking at the task at hand not even paying attention to the race. And then I think my natural ability took over...my instinct. (Wendy Fisher)

*Lessons from compromised situations*

Jonny Law said the following with regard to jumping off of a cliff, and being a couple of degrees off on his take off, which led to him dropping onto a rock:

It was probably an eighty, eighty-five footer and this was a really good learning experience. My take off was kind of angled and I think that the combination of having an angled take off, actually makes you drop away, you know it is like hitting a golf ball on a slope....And you know physical challenges and everything we just talked about (in this interview). It gave me a pretty good outlook on things. What messed me up this last year, after having success and wanting to build on that, I think I messed with my focus a bit. Being more concentrated on results rather than my own personal challenge. (Jonny Law)

And I landed feet first and I took the initial impact and then it was like hip, back, head everything, if it is that big of an air you are going to be compressed. If you try to stomp that on your feet you are going to get hurt. And I mean guys don't like back slapping a cliff but there's just no way that I am going to be stomping a cliff that big on my feet alone. (Mikey Stevenson)

*Lessons from being injured.*

Well I think it has to be the self awareness that allows me to do it. I think injuries have been a big part of it. My first injury I broke my jaw and had my mouth wired shut for a month and I think, *I got to learn from my mistakes* [italics added]. I found that time tough because I was really on my own.... I used to fall a lot on stuff that I don't even think about now. Just being able to fall and get up and hurt yourself and get better, it is just one big learning process.... I think that it touches again on how quickly your reality can change and how trying to be in control as

much as possible but there are always going to be things out of your control. You can't let that choke you up. Some people really allow things to get them down too much, things that are out of their control. Life is too short. How can you let that stuff bug you? That's what I think skiing teaches you! As much as I prepare for the future, you have to love what is going on at the moment. You can't always say I can't wait until I am doing this or I can't wait until I have accomplished that. You just have to chill out.... The fact is my reality changed. This is now my reality. I can't be upset with what I am going to miss in the next three months or what is going to come because of this accident. This is now what I have to deal with. Cope. (Jonny Law)

What I have learned most has come from being hurt. That has taught me a lot of things. When I get hurt I analyze why I got hurt, and then use that knowledge to not get hurt again. And I watch others and when they get hurt, like if they screw up on things, I can be like oh that happened to me too, and then also communicate with your buddies. Since I have been hurt for a while I haven't been able to ski, so I haven't been able to go to the mountains for a while. So I had to focus on other skills. I was saying to Jonny we used to get such a buzz out of the perfect day, the perfect moment, and the biggest peak and the best scenery and it was so great. I was so high. But now I can't do it anymore, so everything was so boring. But then I had to re-find it. When I walk in the street, smiling to an old lady you know that I find that as a buzz. And fixing things, being nice to people, smiling to people and not making a big deal out of nothing. All this stuff is what I learned from not being in the mountains. Down here they are making a big fuss out of nothing. JC:

So if you can't get that buzz out of the perfect day, you are trying to get it from another area? PY: Yeah. JC: Like saying hello to an old lady.

PY: Yeah. That is just an example. I am saying that just because I have found a big enlightenment, doesn't mean that I have to get it only there... Someone does something negative and I pick it up and make it positive. If you take life for granted and you don't put attention on those little things, then it is going to slip away from you and you can't be a better person. So that is my philosophy and what I have learned from my injuries. (Pierre-Yves Leblanc)

#### *Applying Lessons Learned to Sport.*

An important step in acting on knowledge from experiences was to think about future applications of the lessons learned. Each athlete shared at least a couple of experiences about reflecting on something that happened to them, drawing out lessons and then identifying areas that they could use or to which apply this new knowledge. The majority of the areas of application were back in the mountains in similar skiing situations. Hugo Harrison said, "Yeah but I apply lessons in a good way. I remember the lessons from that line and the next time for sure I will stick it."

I think you get good at big mountain freeskiing through trial and error and as you experience more things like big crashes and big cliffs, you are able to apply that to what you are doing where falling becomes unacceptable. For example skiing lines in Alaska. But when you are learning and trying to progress, falling is very important. Number one, if you are on top of a forty footer and you have crashed off of a forty footer and it didn't hurt, you were fine. You can be on top of another forty footer and say, I can do this. I could fall it probably won't hurt. And you

know that it is possible to not get hurt on something like that..... Alaska is very different from anywhere else. It is just so big and the features are just so large and you are taking what you know about skiing and you are applying it to a much different sport... so I was taking my scale that I have created in North America with these regular mountains and applying that scale to the mountains in Alaska.

(Jonny Law)

*Applying lessons learned to life outside of BM freeskiing*

A number of athletes were able to apply the lessons learned from the mountains in other areas of their lives, for example to help them enjoy successful experiences in things such as school, business, and life.

I learned a lot and I would apply it to anything else I did. If I found out I wasn't able to do what I am doing now I would be able to take the lessons I have learned and apply them to like school or business or whatever... I think even quitting smoking was a big step. It took some serious mental strength. Just one day I said no, no more. And I am able to apply that to other things too. (Jonny Law)

If I learned something that I can apply in the city, it is personal achievement. If I do any other job I will try as hard as I can to achieve and do really well, in anything I do. It doesn't matter what it is. I don't know if it is because of the mountains but it has helped me see life. The elements, the nature, I am just a little ant, and filming the world is a bubble we live in. (Pierre-Yves Leblanc)

### *Developing Mindset*

The outcome from the processes involved in post-performance reflection is ongoing learning and the development of a mind-set that athletes can carry into their next experiences in life. Some of the mindset views acquired and shared by these athletes are presented below.

#### *Life views*

JC: What recommendations do you have for people who would like to pursue a career in big mountain freeskiing? JL: Basically you have to become what you do.

(Jonny Law)

Just get the most out of each day. You could just be resting, waiting to go again, and charge it. (Seth Morrison)

Try to be good, and to do good. Skiing is one thing I have always cared about. I want to be good. (Mikey Stevenson)

I met have met some doctors and some other really smart people. They were really smart in who they were in their discipline, but take them out of their discipline and they were nobodies, they were like beginners who couldn't do anything. When I was in the mountains I felt like I had more knowledge than a scientist of the highest level. When you are in the mountains it doesn't matter how much money you have, how much knowledge you have. If a person is not a mountain person, his knees will be clacking like this, he will be white and he will be coughing. I am healthy, I know where I am, I know where the danger is, I feel one hundred percent confident and money will never buy that. So that's where my

richness is. You can have tens of billions of dollars, the yard full of beautiful naked women in the pool, the best food, all those cars, the mountains, the beach, and still be grumpy, and still be bored. And then if you have nothing, or if you have done that before, and now you cannot do it anymore, you need to know that you can find something simple and make your buzz out of something simple. Get something out of simple things in life, and not make a big deal out of nothing. Sometimes the guy gets all upset because his grass looks shitty. And then he is all pissed off and he is going to scream at his kids for that, and there is the chain reaction. If I keep taking something from you then you have to grow it back inside of you and then out of something else. That's what I have learned from being injured and I have been out for ten months now. I was on crutches for eight months. (Pierre-Yves Leblanc)

Some people might work a job that they absolutely hate but they just keep doing it. Their heart might be aching but they still keep doing it. For me it would be forget it, I am out of here. Life is hard work, and the younger you can realize that the better your future will be. For sure the younger you can have the mentality of trying hard in school or whatever is going to benefit you in the long run, will make you happier in the long run. (Wendy Fisher)

Get experience. I have been asked this before and I think it is a hard one, because it has to be fun to be fun to do, if you are not having fun doing this then there is no point. But if you are not having fun doing whatever you are doing then you shouldn't be doing it. If you are having fun going around doing the easy lines then go for it. (Jenn Ashton)

I guess you can pretty much base your whole life on skiing, respect for the mountain and where you live and how you got here. Everything that I am going to do is linked to skiing. (Ryan Oakden)

### *Focused Connection*

A decision was made to emphasize the success element of focused connection because of its uniqueness and importance and because every athlete felt it was critically important to high level performance in this context. Each athlete used his or her own words to describe the importance of a completely focused connection with what they were doing. Orlick (2000) describes this focused connection as an intense, high quality focus on relevant things. A focused connection that led to success emerged from focusing on relevant performance elements at the appropriate time. The athletes spoke about being aware of what their success elements were and identified the appropriate times to focus on each of them. This awareness and high level focus was clearly evident in the athlete quotes presented throughout the results section.

## Chapter V: Discussion

Researchers have explored the elements that breed success in many performance domains including medicine (Tribble & Newburg, 1998), space travel (Orlick & Hadfield, 1999), classical music (Talbot-Honeck, & Orlick, 1998), the arts (Fajeus, 1999), and sport (Orlick & Partington, 1988). Within the realm of sport, the focus has been primarily on mainstream athletics. The purpose of this study was to gain an understanding of the success elements employed by elite BM freeskiers to perform their best while immersed in the high speed, high risk alternative sport of BM freeskiing. The success elements mentioned by the participants were grouped into five major headings. Three success elements included temporal boundaries - pre-performance preparation, performance execution, and post-performance reflection. Two success elements moved beyond temporal boundaries - the love of doing and being, and a focused-connection with sport and life.

The following discussion provides an opportunity to compare and discuss the success elements identified in the results section with existing literature on elements that breed successful performances. The success elements that emerged through the deductive approach are discussed first, followed by the elements that emerged through inductive inquiry.

The deductive approach used to analyze the results of this study was based on Orlick's (2000) Wheel of Excellence. The following section discusses the success elements found in this study and compares them to the success elements found in Orlick's model of performance excellence.

The first element of the Wheel of Excellence is commitment. Orlick (2000) stated:

The heart of human excellence often begins to beat when you discover a pursuit that gives you a sense of meaning, joy, or passion. When you find something within a pursuit, or within yourself, that you are truly committed to develop, everything else can grow. (Orlick, 2000, p. 4)

Orlick's vision of excellence emphasizes the important role that passion and love play in terms of being committed and fully engaged in one's pursuits, leading to successful performances. Each participant interviewed in this study, spoke of the love they had for parts of their sport and their life. The athletes commented on their strong love for BM freeskiing. Through a process of self-reflection Jonny Law asked himself what it was in life that made him happy. What did he really love? He realized that he loved to ski more than anything else, and from that simple realization he broke his daily pursuits into simple goals to create a new reality. From that moment on he began to fill his days with elements of what he loves, elements of skiing, making it easier for him to be committed and connected to his pursuits because they were created from love. *This is an amazing feat of questioning ones emotions, especially in a society where it seems that most people fill their days with activities based on what they think they should be doing from external influences, rather than looking into themselves to decide what they love, and how they can engage in that love more often.*

This understanding of what one loves, and filling ones days with components of that love provided insight into the question of why these individuals purposefully enter such a potentially high risk environment to perform their activity. The challenge inherent in BM freeskiing is one aspect of this pursuit that all these athletes said they love. Jonny Law talked about fighting his common sense when attempting something out of his

comfort zone. Common sense is telling him to “ski around and have some fun” but there is something else driving him to push beyond his comfort zone, challenge uncertainty and build on his experiences. The feeling of self fulfillment, pride, and accomplishment are words that these athletes used to describe the feelings they felt from successes in their sport. These were reasons why they wanted to and did exit their comfort zone and risk, which is consistent with Lyng’s (1990) findings from his sociological exploration of voluntary risk taking.

The second element of excellence in the Wheel of Excellence is a strong focused connection with relevant things at relevant times. The strong focused-connection these athletes had towards their daily pursuits was a success element that held no temporal boundaries and is arguably one of the most important elements in experiencing success in BM freeskiing. According to Orlick (2000); “A fully connected focus releases you from everything irrelevant and connects you totally with your experience or performance. It is a mind-place where nothing else in your world exists apart from being totally connected with what you are engaged in or experiencing at that moment” (p. 7). Athletes often say that in great performances they were in the “zone” (Hanin, 2000), or living in the “moment” (Maddux, 2002) but what does that actually mean and how do they enter that state? The participants in this study said that intense, focused preparation allowed them to enter the “zone” or to be fully “in the moment”. The motivation to dedicate hours of preparation came from their love of doing what they were doing and their memories of past great experiences and the excitement for experiencing similar feelings in the future. One could argue that a strong focused-connection for BM freeskiers within the performance is when the past meets the future, in the present. All of one’s preparation

(past) for this moment sparks excitement for the emotions to be experienced (future), which motivates action in this moment (present). There is a connection between the directives of the mind and the actions of the physical body, both progressing in the same direction at the same time. The athletes in this study seemed to have an amazing ability to create this strong focused connection through focusing on relevant things at relevant times throughout their preparation and performance pursuits. This intense focused-connection has been addressed in the past (Csikszentmihalyi, 1990; Mahoney et al., 1987; Orlick, 2000; Orlick & Hadfield, 1999; Orlick, & Lee-Gartner, 1995; Orlick & Partington, 1988). However, it has been studied primarily in the execution phase of performance. The BM freeskiers showed impressive focusing skills throughout each phase of their performances. In addition, their ability to create a focused-connection with what they were doing appeared to extend beyond BM freeskiing. They indicated that they were able to transfer this focus into other everyday life pursuits.

The third element in the Wheel of Excellence is confidence. All the athletes discussed this success element as being essential for successful performances. Confidence was highlighted in both the pre-performance preparation and performance execution phases. Confidence in their abilities to execute their performance plan, was of the utmost importance to these athletes. This confidence factor has been validated in numerous studies, through accounts from many performers in various performance domains such as; javelin throwing (Jones & Hardy, 1990a), decathlons (Hemery, 1986), wrestling (Gould, Weiss, & Weinberg, 1981), swimming (Jones, Hanton, & Swain, 1994), and international rifle shooting (Doyle, Landers, & Feltz, 1980).

One source of confidence for some athlete's is having a coach who is confident in them (Gould, Hodge, Peterson, & Giannini, 1989; Orlick & Partington, 1988). It is important to note the BM freeskiers do not have coaches. They are able to prepare effectively enough to build the confidence level required to overcome the fear of the severe consequences of a less than best performance. This is a unique component of the findings of this study, and one that warrants further research. How are athletes able to create such high levels of confidence in the face of immense consequences without coaches?

The fourth element of the Wheel of Excellence is using mental images in positive ways to create positive images, target specific daily goals, speed up the learning process, react more effectively to change, improve flawless execution of performance skills, and enhance one's confidence (Orlick, 2000). Moritz, Hall, and Martin (1996) state that a key to performance excellence is to see oneself demonstrating mastery of the skill. The majority of the athletes in this study stated that when imagining their successful performances they employed an internal (or feeling) perspective. This is consistent with White and Hardy's (1995) study in which it was noted that internal visual imagery is more effective when performing a task which requires adjustments according to changes in the visual field such as in canoe slalom racing (or BM freeskiing). It is interesting to note that White and Hardy found that an external perspective seems to be effective for performances judged on form such as gymnastics. A BM freeskiing run is largely judged by form, especially when the performance is for filming. It would be interesting to explore how the use of the combination of internal and external imagery might affect the performance of a BM freeskiing.

The number of elite performers that employ this technique to prepare for successful performances emphasizes the effectiveness of mental imagery. Orlick and Partington (1988) reported that 99 percent of the 235 elite participants of their study used mental imagery in their preparation phase, and Murphy (1994) reported that 90 percent of a survey of athletes training at the US Olympic Training Centre used visualization. The use of visualization to enhance performance is not restrained simply to sport, it's effectiveness has been documented in many other performance domains such as; space travel (Orlick & Hadfield, 1999), elite surgeons (Orlick & Tribble, 2001), and helping cancer patients cope with their treatment and other challenges (Orlick & Koudys, 2002).

The sixth element of the Wheel of Excellence is distraction control. Orlick (2000) stated that at some point, "distraction control becomes the most important mental skill affecting the quality and consistency of your performance" (p.13). The athletes in this study discussed at length the importance of distraction control; the ability to refocus, regaining a positive connected focus when faced with potential distractions, or obstacles. Orlick stated that through reflecting on performances and practicing the art of refocusing, one can learn to reconnect more quickly. The athlete's extensive use of reflection is discussed in the next section, providing insight into their ability to refocus during times of compromise. Orlick also stated that great performers activate positive shifts in focus by using simple reminders, or focus points that rapidly reconnect their attention to what is within their immediate control. The athletes in this study selected focus points throughout their lines (down the mountain), providing visual cues for "safe zones" to be used in compromised situations such as avoiding avalanches or simply to stop if something went very wrong.

Research examining the difference between successful and less successful athletes has shown that those able to focus more effectively are more likely to be successful (Gould et al. 1981; Highlen & Bennett, 1983; Mahoney et al., 1987; Orlick & Partington, 1988). These studies show that successful performers are less likely to be distracted by irrelevant stimuli throughout the performance experience. The importance of avoiding distractions for successful performance has been supported in studies on parachute jumpers (Fenz, 1975), archers (Wang & Landers, 1986) and golfers (Boutcher and Zinsser, 1990).

The final element of the Wheel of Excellence is ongoing learning. Orlick (2000) stated that ongoing learning includes;

“Reflecting on what you have done well; reflecting on what you can refine or improve; drawing out important lessons from each experience or performance; assessing how your commitment, mental readiness, and focus affected your performance; targeting relevant areas for improvement; and acting upon lessons learned on an ongoing basis” (p. 14).

The post performance phase is very important in that it seems to be the area where the athletes take the information that they were exposed to during their run and change it or channel it into practical knowledge for future experiences. This transfer seems to take place as a result of conscious reflection on the run, which then leads to drawing out lessons, then adding them to their mindset that they will carry to future experiences. Orlick (2000) stated; “The quality of your focus affects every learning and performance situation you encounter. It determines your rate of learning, quality of learning, quality of performance, and quality of life” (p.7). As previously discussed, the strength and quality

of the focused-connection for elite BM freeskiers is very strong. Thus their ability to learn from their experiences is great. This is supported by the lessons they learn and act on and by the athletes ability to transfer the lessons they learn to other areas of their lives.

This process of self-reflection and its positive effects on learning is also evident in other performance domains such as for students, resident medical students, teachers, and astronauts. Mitchel and Yiu (1995) studied medical students in their residency phase to explore what led to the most efficient learning. Many of the students said it was due to reflecting on their experiences. This was consistent with Lyon and Brew's (2003) study of young students experiencing teaching for the first time, when students who reported getting the most out of their experience reflected upon it to turn it into learning. Tillema (2000) reported that reflecting on practice is an effective way to illicit belief changes for student teachers preparing to enter their professional domain. Orlick and Hadfield (1999) discussed the use of reflecting continuously upon critical changes occurring during a space mission and its effect on success a successful completion of the mission, and the importance of drawing out lessons and applying them to future situations to avoid repeating mistakes.

An interesting aspect of the reflective phase for BM freeskiers was that all the athletes seem to automatically reflect on their experiences, *especially* if they faced a life-threatening situation. Jonny Law said that after each event, he puts his head on his hands and visualizes his performance, and then compares it to his pre-competition visualization to note any differences and draw out lessons from the experience. Henry (2002) stated in his study exploring the psychological impact of exposure to death in contemporary urban policing, that encounters with a realistic threat of one's own life elicits new modes of

adaptation, thought, and feeling. The exposure to life threatening situations that BM freeskiers face might naturally cause the athletes to reflect upon the experience to draw out lessons to be better equipped if they are faced with a similar situation.

In exploring the effects of a near death experience, Walton (2001) questioned the participants with regards to their experience and it caused a change in their way of thinking. The results included improving interpersonal relationships, an increased openness and acceptance of others, an increased desire to be of service to others, and a loss of the fear of death.

One of the most amazing aspects of the success elements used by the performers was the transferability or applicability of past experiences to future experiences. Many of the athletes mentioned their ability to apply the success elements they employed for BM freeskiing to whatever challenge they pursued, whether it was in skiing or other areas of life. This is consistent with the “Quest for consistency” (p.91) component of ongoing learning which Orlick (2000) presented; “The mental skills required to perform your best are developed long before the day of the contest through hours of quality preparation and through experiences” (p. 91). One athlete in this study quit smoking using some of the success elements he used in his sport; another started his own action sport filming company. One started her own coaching clinic, and all the participants progressed in their sport by applying what they learned to future experiences in BM freeskiing with the use of the same success elements.

The ability to know what to focus on and when, as stated by these athletes, becomes natural or instinctual. It is based on instinct; instinct that is created and constantly progressing from one’s experiences. Each athlete mentioned times when they

acted or reacted purely from instinct. The majority of the examples were in less than ideal situations where split second life saving decisions had to be made to survive.

The inherent flexibility of the framework of this study, allowed information not covered by the Wheel of Excellence to surface. The success elements that surfaced from this inductive approach included; remaining calm prior to the execution of the performance, physical preparedness, and line selection/inspection.

According to Hardy, Jones, and Gould (2000), successful experiences affect the arousal levels of performance. Psycho physiological studies in race starts (Stern, 1976), putting in golf (Boutcher & Zinsser, 1990), immediately prior to squeezing the trigger in rifle shooting (Landers, Christina, Hatfield, Daniels, Doyle, 1980), and immediately prior to releasing an arrow in archery (Wang & Landers, 1986), this research has shown that expert performers exhibit cardiac deceleration as compared to performers with less experience. Hardy, Jones, and Gould stated "the ability to generate appropriate states is an acquired skill that may be enhanced by appropriate experience" (p. 131). The word appropriate deserves emphasis in that different activities require different or appropriate levels of arousal or activation states (Hockey & Hamilton, 1983), and that failure feedback of an unsuccessful performance can lead to increased anxiety in future performances (Gaudry, 1977; Morris, Davis, & Hutchings, 1981). It is important to note that all of the athletes mentioned that the last thing they do in the pre-performance preparation phase is to try to calm themselves down prior to their run. If they cannot be calm about the run then they should go back to their preparation to look at their connection to their self and the conditions trying to match it up, raise that confidence and allow themselves to be calm. Hugo Harrison said he is always calm and confident with

his runs. His connection to his run is strong because he selects a line that he can ski with 70% of his abilities. Therefore he knows that if something unpredictable happens he has 30% of his ability left to make adjustments. It helps that Hugo is an amazingly gifted athlete proven by his winning the overall world title in 2002. The desire to enter a state of calmness prior to a performance execution was shown in other domains such as in golf (Ferraro, 1999), and interestingly enough in the willingness to pay for lotteries (Mano, 1994).

Being calm prior to a BM freeskiing performance is a level of arousal that contradicts the findings of Racdeke and Stein's (1994) study of felt arousal, thoughts/feelings, and ski performance of recreational slalom skiers. In this study athletes who showed moderately high levels of arousal and positive thoughts/feelings towards their performance had the fastest ski times. One BM freeskier said that early in his career when he was nervous he would try to pump himself up to make himself feel strong again, which many times led to crashes while performing. However now as he progresses in his skiing he said that he is working on remaining calm prior to his performances.

White (1993) stated; "It appears that the demands of the environment made it more likely that the athletes would experience high anxiety, low self confidence, and perhaps lose their concentration when involved in individual sport" (p. 50). This observation was made when comparing team sports to individual sports; no performance level was presented. The BM freeskiers interviewed for this study contradicted everything in this statement in that they were extremely calm, totally confident in their abilities, and fully focused and connected to what they were doing, in an extremely demanding environment. Perhaps the response to demanding environments as presented

by White is true at a lower performance level, however, as one gains more experience the demanding environments may actually fuel certain athletes to perform their best.

As indicated in the results section, the participants regard physical training as a crucial success element. The obvious connection between successful performance and physical preparedness is the extreme physical demands of BM freeskiing, skiing steep chutes thousands of feet long, performing in areas where there may be a lack of oxygen, landing drops off of cliffs upwards of a hundred feet, etc. To ensure their bodies are prepared for the demands of the sport, the participants try to ski as many days as possible in all weather conditions. In conjunction with actually skiing, the participants engage in cross training activities such as mountain biking, surfing, kayaking as well as training at the gym. This dedication to train at extremely high levels comes from the motivation that they love what they are doing. This is in accordance to research conducted by Hardy and Parfitt (1994), Mahoney et al., (1987), and Orlick and Partington, (1988), who indicated that high levels of motivation may be necessary to train as often and at a high enough quality to perform at the elite level.

Along with physical preparation in terms of training, the participants indicated that nutrition and rest are key elements in being prepared to perform optimally. As indicated by one athlete, it is important to listen to your body to be aware of the signs of overtraining and to know when to rest to allow your body to rejuvenate to avoid injury. The importance of rest and listening to one's body has been discussed at length by Orlick (2000).

Due to the nature of BM freeskiing in that there are no fixed lines or manoeuvres that the participants must perform it remains up to the athlete to decide what they are

going to do. A successful performance as indicated by the participants requires a connection to both ones internal and external environment while selecting a line to ski. According to Bandura and Schunk (1981) effective goal setting is a crucial element in building self-confidence. Bandura and Schunk stated that proximal goals are markers for increased self competence when performed successfully and as distal goals are approached an increase in perceived competence occurs leading to increased self confidence. Hugo Harrison described line selection as Bandura and Schunk described goal setting. His distal goal was to have a great performance skiing a certain line. His proximal goals were specific features of the chosen line. Each BM freeskiing line is a series of proximal goals heading to the distal goal of performing well.

Earley, Connolly, and Ekegren, (1989), and Jones and Cole (in press), stated that if goals are too difficult for the performers ability, increased anxiety and decreased self confidence will ensue. For a BM freeskier the result of poor goal setting leads to almost certain severe injure and probable death. When choosing ones line one athlete stated “you must ask yourself what you can give that day, and what the mountain can give” (Pierre-Yves Leblanc). The connection with the self and the elements seems to be directly effected by ones ability to stay humble. A mountain is a much more powerful force then the skier, thus must be respected. If a BM freeskiers ego inflates, their preparation may suffer by either choosing a line that they are not capable of skiing, or by overlooking something in the inspection phase because they are over confident. They may simply select a line they have skied before but attempt to ski it in a manner that the present conditions will not allow. If the BM freeskier remains humble and honest with their assessment of their internal and external conditions they will/can select a line that is

appropriate for that time/reality and create a connection with the mountain rather than fighting it. As stated in the review of literature for this study, Duda and White (1992) concluded that athletes with an ego orientation in terms of perceived elements of success may face long-term motivational problems by relying on uncontrollable variables. Due to the dangerous nature of BM freeskiing those who employ an ego orientation may face short-term health issues, namely death.

Awareness of their external and internal environment tells the BM freeskiier what is possible to perform that day. It is a continual process because the conditions are constantly changing. If one of the elements is not at an optimal level it is essential for the athlete to remain humble and choose a line that accommodates the present condition. And each athlete shared less than best experiences that one could argue were caused by ones ego being higher than their connection between the elements and themselves. It seems that if the athlete prepares "effectively" the connection between the two increases. Some interesting literature of connectedness and engagement exists in a study by Adashko and Alyson (2004) entitled, the experience of yoga during the transition to motherhood. This study highlighted the connectedness with self-body, mind and spirit, and helped the mother feel connected with the baby in-utero. This connectedness helped reduced stress in the child bearing process. Shin (2004) explored the role of connectedness and engagement in the workplace. It was found that positive engagement to one's work was beneficial in terms of dealing with stressful situations, and enjoying one's employment.

When the performance run is going as planned the split second decisions made while skiing seem to take place at the subconscious level. The athlete has already identified and dealt with the reality they are facing and thus don't have to expend extra effort in

deciding what to do. The participants stated that they were able to enter a state of automaticity while performing. This state was possible only if the elements of the pre-performance preparation phase were performed thoroughly. This is consistent with Eysenck's (1984) explanation that a state of automaticity can only be experienced with extensive practice of a performance. As mentioned earlier the participants of this study built an effective instinct for BM freeskiing by gathering experience through years of practice and ongoing learning, this according to Eysenck allows them to enter a state of automaticity.

The words the participants used to describe these moments are the same as those used by Dr. Csikzentmihalyi in his concept of Flow, namely, automaticity, and time distortion (Csikzentmihalyi, 1990). As in many sports many athletes have described peak experiences by stating that the actions felt easy, or effortless, events that were short seemed to last a long while, and lengthy events seemed to pass in mere moments. This phenomenon of time distortion was also mentioned by the participants of this study. One could argue that time in the common form that we know it becomes irrelevant during moments of complete connectedness. The individual has prepared thoroughly and effectively enough that actions and thoughts occur in a flowing harmonious manner at the right moment without having to be aware of the time they are occurring.

One intriguing aspect of performance execution in this high risk context is that these individuals are making life saving decisions within fractions of seconds. This has not been adequately addressed in previous applied sport psychology literature, and will be discussed in greater detail later in this discussion section.

The moment something happens that was not calculated whether from an increased ego during the pre-performance phase, or because the obstacle was something that was nearly impossible to calculate such as a rock under a blanket of snow, the reality of the situation changes instantly and the athlete goes into a state that one participant describes as being “turbo alert” (Mark Abma). Hardy et al. (2000) state that automatic processes “are of little use when the nature of the task alters and a modified response is required” (p.179). In this “turbo alert” state the decisions are dealt with at the conscious level because no plan has been made to deal with the situation, or as Eysenck (1984) would argue, the action has not been practiced therefore entering a state of automaticity would not even be possible. The progression of decision making in times like these are amazing due to the amount of thought process that takes place in a split moment. It is interesting to note that as previously mentioned time distortion is an element of Flow (Csikzentmihalyi, 1990) during great performances, however it is also an element in less than ideal situations. This conscious decision process during the performance follows the same steps as in the pre-performance phase.

1. *Identify the obstacle:* i.e., an avalanche
2. *React:* Usually “oh no!” the elite performers get out of this phase immediately
3. *Call up a plan:* Comes from memory. Their preparation tells them where to go and where not to go, experience brings options
4. *Choose a plan:* Many athletes said you do not have time to weigh the pros and cons of a decision, you need to pick a plan fast. Most of the time the athletes react to the first option that they can think of. Instinct through experience.
5. *Have trust/ confidence in the decision:* If not you will hesitate

6. *Remain calm*: To ensure you can continue to react to the changing situation in a way that may decrease the negative affects of the less than ideal situation.

Hardy et al. (2000) state that the importance of concentration for elite performance is emphasized by looking at the consequences of a lapse in concentration. For most sports a lapse in concentration has a direct impact on the performance outcome (Weinberg, 1988), the consequences related to a less than best performance for most sports ends at task results, whereas a less than best performance for elite BM freeskiers as previously mentioned may mean severe injury and probable death. Therefore the importance of concentration while immersed in this alternative sport is immense. Lyng (1990) stated, "in conceiving of high-risk activities the focus shifts away from fear, arousal, and preoccupation with death and toward the spontaneous, anarchic, impulsive character of the experience" (p. 864). With effective preparation it is obvious that the focus is not on death, or fear, or arousal. Impulsive or anarchic are not words that the athletes used to describe their experiences. Their actions are calculated in an attempt to bring as much control to a situation or an environment that is unpredictable.

The consequences of a less than best performance in BM freeskiing namely severe injury and probable death have been mentioned a number of times throughout this thesis, through the detailed accounts of the participants. The athletes are well aware of the deadly consequences of a less than best performance and consequently carefully plan their run and line to avoid danger zones. The thought of death or severe injury does not enter their mind while engaged in a successful run. During the line selection/ inspection phase, the athlete uses risk management to compare the negative consequences of a less than best performance with the positive consequences of a great performance. If they feel

good about the upcoming run and the line, the athletes decide to accept the risks and their chosen line, and continue with their preparation process which increases their confidence and their ability to trust their plan. At this point their focus shifts away from anything negative and they focus solely on executing the run. One athlete stated that if the negative consequences continue to stay in the forefront and lead to anxiety towards the run, he either backs off completely and creates a new plan, or looks to his preparation to try to alleviate the anxiety by accounting for whatever it was that was causing the anxiety. The importance of effective preparation in removing the negative thoughts of a less than best performance is consistent with the information provided by Chris Hadfield in his interview with Terry Orlick. Chris stated, “The main benefit to detailed preparation is success; that’s the short answer. The long answer, the main benefit of detailed preparation is confidence and lack of fear” (p. 88). Chris went on to say that the best indicator of readiness is not fear or anxiety, but rather relief of actually being engaged in the performance. This was consistent with these athletes thoughts towards being engaged in the performance in BM freeskiing.

This ability to embrace a challenge that holds such immense consequences is a unique element of what these performers enjoy. The majority of existing literature pertaining to reaction to death, primarily focuses on coping with the death of someone close to you (Serwint, 2004), coping with the feelings experienced after a near death experience (Walton, 2001), or reasons death occurs in certain performance domains (Khan, Singer & Stock, 1997). Very limited literature exists that looks into the success elements used to prepare for a performance of any sort where the consequences of a less than best performance could be fatal. Miller and Taubman-Ben-Ari (2004) conducted a study

where they explored the affect of death reminders on the tendency to take risks in scuba diving. The Terror Management Theory (Lieberman, 2004) was used to guide the study and results showed that divers with high self-esteem were not negatively effected by the external death reminders and their tendency to take risks while diving. It is interesting to note that although severe injury and death are an obvious possibility in BM freeskiing, the athletes themselves do not focus on those aspects of the sport because they are training and focusing on elements that will increase their likelihood of performing successfully. They simply regard death and severe injury as a consequence of a less than best performance and use it guide a successful performance. This perspective contradicts “normal” thinking in today’s society where death or fatal situations are avoided as often as possible (Lyng, 1990). These performers have developed success elements that have equipped them with the ability to perform in conjunction with an element of life that has instilled fear in humans throughout time; death. The fact that these athletes are using elements of the Wheel of Excellence to guide successful outcomes for such extreme challenges shows the pure power of these human success elements.

The findings from this study provide insight into the success elements used by some of the world’s elite BM freeskiers in their pursuit of excellence in this high-speed, high-risk alternative sport. The most applicable concepts discussed in this study, namely a strong focused-connection with ones pursuits, the ability to remain calm, and reflecting on ones experiences to draw valuable lessons and continue to progress could help other athletes in BM freeskiing as well as other performers improve their performances and potentially help them develop strong life mind-sets and perspectives beyond the realm of sport.

### *Future Research*

The opportunity for future research in furthering our understanding of successful performances is abundant. It is well known that success elements have been studied in many performance domains (Fageus, 1999; Hadfield & Orlick, 1999; Orlick & Partington, 1988; Talbot-Honeck, & Orlick, 1998; Tribble & Newburg, 1998). This area of high-speed, high-risk alternative sport has remained virtually untouched in terms of the success elements needed to perform optimally. Personality types of the athletes (Kerr, 1991), and sociological studies questioning *why* someone would want to do these activities, (Lyng, 1990) have been conducted. However the knowledge that came from those studies is not very applicable to other areas of life. Further understanding of *how* individuals build, and use physical and mental elements to face life threatening situations with a focused-connection on relevant things allowing one to enjoy the experience when things go as planned, and to make less than ideal situations manageable when obstacles arise could provide information that is applicable in many areas of life.

This study is the first to take sport psychology research beyond the realm of mainstream athletics, and BM freeskiing has been the first high-risk, high-speed alternative sport to be explored in terms of the success elements needed to perform optimally. Other high-risk, high-speed alternative sports, such as big wave surfing could be studied to see if the athletes of that sport employ similar success elements to perform optimally. The arousal state of being as calm as possible moments before a high-risk experience is a specific area of interest for future research. This forum of sport offers a unique opportunity to discuss with someone their reactions to extremely dangerous situations. These athletes consciously put themselves in an environment where simple

errors could be fatal, yet are able to maintain a level of calmness that seems to not match previous findings with regards to arousal levels and environment. The effect experiences in the high-risk, high-speed sport has on developing wise mind-sets such as pulling lessons from every experience they live should be explored.

### *Importance of Findings*

The importance of the findings from this study is that no research has been conducted with regards to success elements and alternative sport. These findings add to the understanding of what are elements for successful performances. Most importantly in situations where the result of a poor performance is severe, with the very real chance of dying.

These findings may prove to be quite valuable for those involved in high-risk alternative sport who want to improve their experiences while engaged in their activity, whether it be coaches, parents of the athletes, sponsors, and of course the athletes themselves. Specifically, BM freeskiers may be able to apply the success elements discussed in this study to their pursuits to improve the success of their performances.

Overall the applicability of these findings is strong. Beyond the realm of BM freeskiing I feel that the findings can be used in almost any situation that someone wishes to improve their performance in whatever their pursuits may be. Especially the elements of a focused-connection with what one is doing, combined with a reflective process upon the completion of the performances. As previously mentioned this leads to lessons learned, strong mind-sets and experience to call upon in future times. Whether a student in class or a business man in a meeting if they are connected to being in that class or

meeting and draw lessons then go think about what they learned after they will continue to grow, attaining the goals they set for themselves.

## References

- Achte, K. A. (1980). The psychopathology of indirect self-destruction. In N. L. Farberow (Ed.), *The many faces of suicide*. N.Y: McGraw-Hill.
- Adashko, R., Alyson, D. (2004). The experience of yoga during the transition to motherhood. *The Sciences & Engineering*, 65, 423.
- Bandura, A., & Schunk, D. H. (1981). Cultivating competence self efficacy and intrinsic interests through proximal self motivation. *Journal of Personality and Social Psychology*, 41, 586-598.
- Barbour, S., & Orlick, T. (1999). Mental skills of National Hockey League Players. *Journal of Excellence*, 2, 16-36.
- Bernard, J. (1968). The eudaemonist. In S. Z. Klausner (Ed.), *Why men take chances*. Garden City, N.Y: Anchor.
- Blakeslee, M. (2002). *Into the yikes zone: A conversation with fear*. New York: Dutton.
- Boutcher, S. H., & Zinsser, N. W. (1990) Cardiac deceleration of elite and beginning golfers during putting. *Journal of sport and Exercise Psychology*, 12, 37-47.
- Burke, S., & Orlick, T. (2003). Mental strategies of elite mount Everest climbers. *Journal of Excellence*, 8, 42-58.
- Burton, D. (1993). Goal setting in sport. In R. N. Singer, M. Murphy, & L. K. Tennant (Eds.), *Handbook of research on sport psychology* (pp. 467-491). New York: Macmillan.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper & Row.

- Csikszentmihalyi, M., & Jackson, S. (1999). *Flow in sports: The keys to optimal experiences and performances*. Champlain, IL: Human Kinetics.
- Delk, J. L. (1980). High-Risk Sports as Indirect Self-Destructive Behaviour. In N. L. Farberow (Ed.), *The many faces of suicide*. N.Y: McGraw-Hill.
- Denzin, N. K., & Lincoln. Y. S. (2000). *Handbook of qualitative research second edition*. Thousand Oaks, Sage publishing.
- Doyle, L. A., Landers, D. M., & Feltz, D. L. (1980). Psychological Skills for Elite and Subelite Shooters. Paper presented at the North American Society for Psychology of Sport and Physical Activity. Boulder, CO.
- Duda, J. L., & White, S. A. (1992). Goal orientations and beliefs about the causes of sport success among elite skiers. *The Sport Psychologist*, 6, 334-343.
- Earley, R. C., Connolly, T., & Ekegren, G. (1989). Goals, strategy development and task performance: Some limits on the efficacy of goal setting. *Journal of Applied Psychology*, 74, 24-33.
- Ericsson, K. A., Krampe, R. T., & Tesch-Romer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100, 363-406.
- Eysenck, M. W. (1984). *A Handbook of cognitive Psychology*. Lawrence Erlbaum, London.
- Fageus, K. (1999). Love and fear: personal and artistic development for musicians. *Journal of Excellence*, 2, 6-10.
- Farberow, N. L. (1980). Indirect Self-Destructive Behaviour: classification and Characteristics. In N. L. Farberow (Ed.), *The many faces of suicide*. N.Y:

McGraw-Hill.

- Fayfield, B. (2004, February). Publisher's letter. *Freeskier*, 6, issue 5, p. 26.
- Feltz, D. L. (1984). Self-efficacy as a cognitive mediator of athletic performance. In W. F. Straub (Ed). *Cognitive Sport Psychology*, Sport Science Associates, Lansing, NY.
- Fenz, W. D. (1975). Coping mechanisms and performance under stress. In D. M. Landers, D. V. Harris, & R. W. Christina (Eds), *Psychology of Sport and Motor behaviour*, Penn State HPER series, University Park, Pennsylvania.
- Ferraro, T. (1999). The zone and golf. *Athletic Insight: Online Journal of Sport Psychology*, 1.
- Filstead, W. J. (1980). Despair and Its Relationship to Self-Destructive Behaviour. In N. L. Farberow (Ed.), *The many faces of suicide*. N.Y: McGraw-Hill.
- Gaudry, E. (1977). Studies of the effects of experimentally induced experiences of success and failure. In D. D. Spielberger & I. G. Sarason (Eds). *Stress and Anxiety Vol. 4*, Halstead, London.
- Gould, D., Hodge, K., Peterson, K., & Giannini, J. (1989). An exploratory examination of strategies used by elite coaches to enhance self-efficacy in athletes. *Journal of Sport and Exercise Psychology*, 11, 128-140.
- Gould, D., Weiss, M. R., & Weinberg, R. S. (1981). Psychological characteristics of successful and non-successful Big Ten wrestlers. *Journal of Sport Psychology*, 3, 69-81.
- Hadfield, C., & Orlick, T. (1999). Interview with Chris Hadfield, Canadian Astronaut. *The Journal of Excellence*, 2, 84-91.

- Hanin, Y. (2000). Successful and poor performance in sport. Emotions in sport. Champaign, IL: Human Kinetics.
- Hardy, L., Jones, G., & Gould, D. (2000). *Understanding psychological preparation for sport: Theory and practice of elite performers*. John Wiley & Sons, NY.
- Hardy, L., & Parfitt, C. G. (1994). The development of a model for the provision of psychological support to a national squad. *The Sport Psychologist*, 8, 126-142.
- Hockey, G. R. J., & Hamilton, P. (1983). The cognitive patterning of stress states. In G. R. J. Hockey (Ed). *Stress and Fatigue in Human Performance*, Wiley, Chichester.
- Hemery, D. (1986). *The Pursuit of Sporting Excellence*. Collins, London.
- Henry, V. E. (2002). The police officer as survivor: The psychological impact of exposure to death in contemporary urban policing. Dissertation Abstracts International Section A: Humanities & Social Sciences, 62, 2889.
- Heywood, I. (1994). Urgent dreams: climbing, rationalization and ambivalence, *Leisure Studies*, 13, 179-194.
- Highlen, P. S., & Bennett, B. B. (1979). Psychological characteristics of successful and unsuccessful elite wrestlers: An exploratory study. *Journal of Sport Psychology*, 1, 123-137.
- Janesick, V. J. (1998a). The dance of qualitative research design: Metaphor, methodology, and meaning. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 209-219). Thousand Oaks, CA: Sage.
- Jackson, S. A., Dover, J., & Mayocchi, L. M. (1998). Life after winning gold: Experiences of Australian Olympic gold-medallists. *The Sport Psychologist*, 12, 119-136.

- Jones, G., & Cale, A. (in press). Goal difficulty, anxiety and performance. *Ergonomics*.
- Jones, G., & Hardy, L. (1990a). Stress in sport: Experiences of some elite performers. In G. Jones & L. Hardy (Eds), *Stress and Performance in sport*, Wiley, Chichester.
- Jones, G., Hanton, S., & Swain, A. B. J. (1994). Intensity and interpretation of anxiety symptoms in elite and non-elite sports performers. *Personal Individual Differences*, 17, 657-663.
- Kabush, D., & Orlick, T. (2001) Focusing for excellence: Lessons from elite mountain bikers. *Journal of Excellence*, 5, 39-62.
- Kerr, J. H. (1991). Arousal seeking in risk sport participants. *Personality and Individual Differences*, 12 (6), 613-616.
- Khan, M., Singer, B. R., & Stock, D. G. (1997). Sports deaths: a study of deaths in servicemen participating in sport. *Injury*, 28, 237.
- Kiewa, J. (2002). Traditional climbing: metaphor of resistance or metanarrative of oppression? *Leisure Studies* 21: 145-161.
- Klausner, S. Z. (1968). The intermingling of pain and pleasure: The stress seeking personality in its social context. In S. Z. Klausner (Ed.), *Why men take chances*. Garden City, N.Y: Anchor.
- Landers, D. M., Christina, R., Hatfield, B. D., Daniels, S. F., & Doyle, L. A. (1980). Moving competitive shooting into the scientist's lab. *American Rifleman*, 128, 36-77.
- Lieberman, E. (2004). Terror management theory. *American Journal of Psychiatry*, 16, 1508.
- Lincoln, S. Y., & Guba, E. G. (1994). Competing paradigms in Qualitative research. In

- N. Denzin, & Y. S. Lincoln (Eds), *Handbook of Qualitative Research*, Sage; Thousand Oaks. London
- Litman, R. E. (1980). Psychodynamic of Indirect Self-Destructive Behaviour. In N. L. Farberow (Ed.), *The many faces of suicide*. N.Y: McGraw-Hill.
- Locke, & L
- Lyng, S. G. (1990). Edgework: A social psychological analysis of voluntary risk taking. *American Journal of Sociology* 95, 851-886.
- Lyon, P. & Brew, A. (2003). Reflection on learning in the operating theatre. *Reflective practice*, 4 (1), 53-66.
- Maddux, J. (2002). Self-efficacy: The power of believing you can. In C. R. Snyder, & S. J. Lopez, (Eds), *Handbook of positive psychology*. London: Oxford University Press.
- Mahoney, J. M. (1988). *The psychological Skills Inventory for Sport (R-5) (5<sup>th</sup> rev.)*. Goleta, CA: Health Science Systems.
- Mahoney, J. M., Gabriel, J. T., & Perkins, S. T. (1987). Psychological skills and exceptional athletic performance. *The Sport Psychologist* 1, 181-199.
- Mano, H. (1994). Risk-taking, framing effects, and affect. *Organizational Behaviour & Human Decision Processes*, 57, 38-58.
- Martens, R. (1987). Science, knowledge, and sport psychology. *The Sport Psychologist* 1, 29-55.
- Maslow, A. H. (1966). *The Psychology of Science: A Reconnaissance*. New York: Harper & Row.
- Maxwell, J.A. (1996). *Qualitative research design: An interactive approach*. Thousand

Oaks: Sage Publications.

- Miller, G., & Taubman-Ben-Ari, O. (2004). Scuba diving risk taking a terror management theory perspective. *Journal of Sport & Exercise Psychology*, 26, 269-282.
- Mitchel, R., & Liu, P. (1995). A study of resident learning behaviour. *Teaching and Learning in Medicine*, 7 (4).
- Moore, W. E., & Stevenson, J. R. (1994). Training for trust in sport skills. *The Sport Psychologist*, 8, 1-12.
- Moritz, S. E., Hall, C. R., & Martin, K. (1996). What are confident athletes imaging?: An examination of image content, *The Sport Psychology*.
- Murphy, S. M. (1994). Imagery interventions in sport. *Medicine and Science in Sports and Exercise*, 26, 486-494.
- Orlick, T. (1986). *Psyching for Sport: Mental Training for Athletes*. Champaign, IL, Leisure Press.
- Orlick, T. (1992). The psychology of personal excellence. In Singer, R. N., Hausenblas, H. A., & Janelle, C. M (Eds.), *Handbook of Sport Psychology 2<sup>nd</sup> ed* (p. 282). New York: John Wiley & Sons, Inc.
- Orlick, T. (1998). *Embracing Your Potential: Steps to self-discovery, balance, and success in sports, work, and life*. Champaign, IL, Human Kinetics.
- Orlick, T. (2000). *In Pursuit of Excellence: How to win in sport and life through mental training*. Champaign, IL, Human Kinetics.
- Orlick, T., & Hadfield, C. (1999). Interview with Chris Hadfield, Canadian Astronaut. *Journal of Excellence*, 2, 84-91.

- Orlick, T., & Kouidy, J. (2002). Coping with cancer: lessons from pediatric cancer patient and his family. *Journal of Excellence*, 7, 36-53.
- Orlick, T., & Lee-Gartner, K. (1995). Winning the Olympic downhill. *Journal of Performance Education*, 1, 48-56.
- Orlick, T., & Partington, J. (1988). Mental Links to Excellence. *The Sport Psychologist*, 2, 105-130.
- Orlick, T., & Partington, J. (1999). Modeling mental links to excellence: Mte-2 for quality performance. *Journal of Excellence*, 2, 65-83.
- Orlick, T., & Tribble, C. (2001). Interview with Curt Tribble, elite surgeon. *Journal of Excellence*, 5, 117-125.
- Racdeke, T., & Stein, G. (1994). Felt arousal, thoughts/ feelings and Ski performance. *The Sport Psychologist*, 8, 360-375.
- Rodgers, W., Hall, C., Buckolz, E. (1991). Effect of an Imagery training program on imagery ability, imagery use and figure skating performance. *Journal of Applied Sport Psychology*, 3, 109-125.
- Rubin, H.J. and Rubin, I.S. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage Publications.
- Scanlan, T. K., Stein, G. L., & Ravizza, K. (1989). An in-depth study of former elite figure skaters : II. Sources of enjoyment. *Journal of Sport & Exercise Psychology*, 11, 65-83.
- Serwint, J. (2004). One method of coping: Resident debriefing after the death of a patient. *Journal of Pediatrics*, 145, 229-234.
- Shin, K-H. (2004). Job engagement and job burnout in a South Korean sample. *The*

*Sciences & Engineering*, 64, 6366.

- Stern, R. M. (1976). Reaction time and heart rate between the GET SET and GO of simulated races. *Psychophysiology*, 13, 149-154.
- Talbot-Honeck, C., & Orlick, T. (1998). The essence of excellence: Mental skills of top classical musicians. *Journal of Excellence*, 1, 61-75.
- Tillema, H. (2000). Belief change towards self-directed learning in student teachers. Immersion in practice on reflection on action. *Teaching & Teacher education*, 16 (5-6) 575-591.
- Tomas, J. R., & Nelson, J. K. (1995). *Research methods in physical activity*. Champaign IL, Human Kinetics.
- Tribble, C., & Newburg, D. (1998). Learning to fly: Teaching mental strategies to future surgeons. *Journal of Excellence*, 1, 6-19.
- Ungerleider, S., & Golding, M. J. (1991). Mental practice among Olympic athletes. *Perceptual and Motor Skills* 72: 1007-1017.
- Vealey, R. S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology*, 8, 221-246.
- Walton, J. (2001). Near death experiences: a rite of passage into personal transformation. *The Sciences & Engineering*, 61, 4648.
- Wang, M., & Landers, D. (1986). Cardiac response and hemispheric differentiation during archery performance: A psychophysiological investigation of attention. *Psychophysiology*, 23, 468.
- Weinberg, R. S. (1988). *The Mental Advantage: Developing Your Psychological Skills In*

*Tennis*, Human Kinetics, Champaign, IL.

Weinberg, R. S. (1993). Goal setting and motor performance: A review and critique. In G. C. Roberts (Ed.), *Motivation in Sport and Exercise*, Human Kinetics, Champaign, IL.

White, S. A. (1993). The relationship between psychological skills, experiences, and practice commitment among collegiate male and female skiers. *The Sport Psychologist*, 7, 49-57.

White, A., & Hardy, L. (1995). Use of different imagery perspectives on learning and performance of different motor skills. *British Journal of Psychology*, 86, 169-180.

Zucherman, M., Kolin, E. A., & Zoob, I. (1964). Development of a Sensation-seeking scale. *Journal of Consulting and Clinical Psychology*, 28: 477-482

## Appendix A

### Interview Guide

#### Intro Questions

1. How did you get into Big Mountain freeskiing?

Probe for: what inspired the athlete to get involved?

2. What is it that you love most about BM freeskiing?

Probe for: love of; actually being there, skiing down the mountain; what drives them to do it?

3. Do you have those experiences anywhere else in your life?

Probe for: other activities in their life in which they enjoy similar experiences.

4. What is the most challenging or difficult part for you?

Probe for; what do the athletes do to perform at the top level; the effects of fear of the most challenging or difficult part and their performance

#### Success Element questions

1. Can you tell me about one or two of your best experiences, competitions or runs?

Probe for: -How they prepare for the best experiences

-how they chose the course down

-pre-run thoughts

-pre-competition focus

-focus immediately before pushing off at the start

-details on what is going through their mind and body at the top

-examples of great moments in a run

-how they shift from thinking about the line to actually doing it

2. What were you thinking about, during the best runs?

Probe for: -how they refocused during the run if something went wrong

-compare this focus to that of a not-so-good run. Discuss any differences

-what would make them back off something?

-times when they wanted to back off something but did it anyway.

What did they focus on to be successful in such a situation?

-the effects of feelings when choosing a line.

-what does respecting the mountain mean to them? How do they respect the mountain or not respect the mountain?

3. Could you further explore how you get through the adversity, uncertainty or fear that may surface at different times in your run, season or career or life?

Probe for: -feelings during scary experiences, what they did, how they felt, how they got through it  
-what is the worst part in these situations

4. Is there anything you learned on the mountain that you carry into your life?

Probe for: -do these success elements come into play in other areas of your life  
-specific examples

5. What recommendations would you have for a younger or less experienced Big Mountain freeskiers in terms of how to perform their best?

Probe for: -the most important things to practice or learn  
-the success elements that will help them become their best and stay alive.

6. Is there anything else you would like to add? Anything we discussed or did not discuss. (Wrap-up question).

Interview debrief:      What was your impression of the interview session?  
                                 How did you feel when I first contacted you?  
                                 Before we began?  
                                 During the interview?  
                                 Now?

## Appendix B

## Example of a best performance

To illustrate the affects of the success elements two examples of complete runs have been included in the appendix section. The first is an example if of an ideal run. And the second example is of a less then best performance. Both runs are from the same athlete (Jonny Law) to show the difference for him.

JC: The example in France is so amazing because just before you are going to go there is a helicopter hovering above your head.

JL: Well the interesting thing about that was that it was there and super loud and my heart was pumping, and the second he said go, the helicopter turned off. As far as I was concerned the helicopter wasn't there I couldn't hear it, it was just gone. JC: Because you were so focused on what you were doing? JL: Yeah. JC: Do you think you know why you were so focused. JL: It was just like ski racing I would never hear cheering, I would never hear the cow bell you just go until you are done....And we get to the venue and it was awesome. We had a ton of snow there were cliff bands there were some steep zones it was just awesome. And then we were told that we couldn't inspect. JC: No? JL: Yeah dude we had to inspect from afar with binoculars. The tram kind of went up on top like lookers left so you could kind of see stuff. But it was still a long distance and who knows with depth perception and the host country competitors had all skied it of course. JC: Do you think that is part of why they did it? JL: It is hard to say but I am really glad they did. I think it really separates the weak from the strong and the good from the great. And it was intense I. JC: So what did you do? JL: Inspection how did I do it? I with binoculars, straight up with binoculars. And actually I took a picture of a picture with a digital camera, I was able to zoom in on stuff. But still it wasn't able to give you, like what if there was shrapnel on the take off and stuff like that. I pretty much came up with a game plan. Like my last cliff it was probably a good forty forty-five footer, but it was like a big band with rocks outcropping rocks on either side, like a tranny that built up into it with wind and stuff. And it I didn't have that angle right I would have landed on rocks which would have gone really wrong. So what I was able to do, because the face was fall line with a cat track so I was able to sit on the cat track with the cliff I wanted to hit and my landing lined up, and then I look past myself, I turned around, looked past myself to find a landmark that would work with that take off. So I used the same technique as I would have if I was on top of it, but from below. I remember those, it was very stressful because I was in France I was never there before. First time competing here, first time skiing there, and the upper management of Dynastar was there. Who at the time were my sponsors. I was going fourth. And you know within like Guerlain Chicherit and Manu Gaidet. And I remember the three guys in front of me remember I was going fourth. The three guys in front of me were not considered high profile. So they went and then it was my turn and I was doing my focus thing where I keep it calm and keep it chill. But it was really difficult this time because it was more difficult to become more confident with what you want to do, not being able to inspect basically, I was just like dude! I just relaxed and the three people had gone and they were like ok Johnny are you ready? And

at that point I allow myself to start to get psyched up, not like aggressive or anything like that. I just allow myself to really allow myself to become ready, to do what I want to do. And so I was like yeah, I'm ready. And they were like ok you have twenty minutes. Dude what are you talking about? And they were like we need to wait for the helicopter. I am like again what are you talking about? And they wanted to film some of the dudes, so they put a helicopter above my head. So vvvvvv,vvvv,vvvv (helicopter noises) yeah the wind was just, and my heart is now going I am trying to focus and keep chill. Like I am about to kill myself with this line. But I felt good about it I felt that I had really spent a lot of time looking at the pictures and riding the tram trying to get a good look at it. But still it was really challenging. And then skiing down, the comp was two runs two day of skiing, like one run each day, um on the same venue. So like the first day I remember skiing down and there was no tracks either yeah so one I was coming into one of my features that I wanted to jump off of, I wasn't completely sure if I had it right and luckily I didn't have to stop because I had an exit strategy if it didn't look right. Basically I had everything going, I had exit strategies that if I was skiing up to something that I wanted to do and found out that I couldn't or I wasn't sure of it I would have a way to keep it fluid and to get out. So like the same think I am skiing up to it and I was trying to gauge your level of I guess just confidence really confidence basically. How you are feeling physically, as well as mentally. JC: This is during the run? JL: This is during the run, and you are skiing and it was wicked powder and ski up to it and it was all split second that we are talking about. And so for a split second I wasn't feeling right about sending it off this cliff so I was able to turn around and kept it fluid, but you know you got to be really in tune with how you feel about what you are doing. Like you don't just want to send it because you are in a comp, and I have made mistakes like that in previous comps. Again you have to relax and it is not worth to kill yourself with this stuff. And yeah I remember coming up to that last hit. And I was thinking I am making more turns then I have to just totally milking it. And I was like oh yeah! And I just saw my landmark in the distance, and who knows if somebody moved it or not. JC: Oh what was it? Something that could be moved? JL: Yeah it was a flag. JC: No way I thought it was something immovable. JL: No this is like we were talking like hundreds of feet away. And it was just like a sponsor flag in the background. It was awesome, I ended up second in that comp.... The finish line was kind of away from where the spectators were watching and there were a lot of them. And I came to the finish line and it usually takes a while to allow myself to come down from what I had just done. Your eyes are just your heart is pounding and you are shaking. And I put my head down, and this is what I usually do at the end of competitions before I talk to anybody. I stop and I go through what I had just done, I visualize what I did. I visualized what I just did and try to compare it to what I visualized before I had done it. It is a bit of some sort of closure, because you really give a lot of yourself too, it is life or death basically. You know it is not you are not going out there and swinging a bat. You are controlling a day in your life that could turn out so wrong. And I don't know I remember getting to the bottom, head down, poles in my armpits you know just relaxed get my heart rate down and visualizing the run that I had just done. And all of a sudden all of these kids surrounded me and they are all yelling in French you know numero une bla bla bla and I didn't know what the hell they were saying but it sounded good they got me to sign their helmets and stuff and I found that I must have

been in a serious emotional state you know because like I said about giving so much of myself out there and I basically broke down, with these kids all around. Because personally just being able to have done what I did I found very fulfilling and it was also the realization of my ultimate goal of what ever I guess to have people stoked on me to watch me ski. Never had I thought that I could be one of those guys. I just was going to try to be my best to be one of those guys. And at that moment I totally broke down.

Jonny Law's account of a less than best performance:

JL: Yeah totally. I am actually curious to see how, because the crash I just had three months ago, that is a whole different level man. JC: Yeah you want to talk about that? JL: Sure (laughing). Um yeah it was like nothing I can't even describe it well. I was skiing a line and Alaska is very different from anywhere else. It is just so big and the features are just so large and you are taking what you know about skiing and you are applying it to a much different sport. I mean Alaska is completely different, and so I was taking my scale that I have created in North America with these regular mountains and applying that scale to the mountains in Alaska. And the line that I skied it was really big and it was probably a couple thousand feet long and I wasn't going to hit any cliffs or anything. But I skied fall line and I was hoping to get onto this turtle back spine which just kind of came out of the snow out of the pitch. And was hoping to be able to ski up onto the spine in the middle of this line and the sluff would be going around me. I realized that this spine, this turtle back spine just came out like super steep and it was probably like thirty feet high, it was like nothing I had ever seen before. I mean you see a spine a turtle back spine you just don't think like that they could get that big. And I am skiing towards it and I was like dude I realized that I couldn't get on it. Then I realized that I have a couple tons of snow coming at me from the sluff. And I had a second to think about it, like another split second moment. And within that split second moment I thought I either try to get onto that spine and I get nailed by my sluff, or I point it and destroy myself because it wasn't really ideal for straight lining. And I decided within that split second I tried to crank a turn hoping it was further away from me hoping I could get away under it and around it and I had no idea of what was going to happen. And I think I decided to turn right instead of left because the slope was sort of funnelling left. Heading towards the spine. So I thought that the snow might be going in that direction and the second I initiated my turn I saw a trickle of snow, and another one of those split seconds and I was like oh no! Oh no! And it hit me like a freaking bus, like nothing I had ever experienced. I had been in some sluffs around here, like you make your own sluff's and it is like maybe a little bit around you boot maybe and you kind of loose your balance a little bit. But this was a bus this was just boom hit me like nothing I had never felt and immediately I was going twice as fast as I was before and the violence of it was like nothing else. JC: Did it feel like water like that kind of violence? JL: Yeah but then stuff like yanking on you and you don't know if you are up or down. And immediately my full faced helmet got packed with snow, and so I wasn't breathing and I just kept falling and falling and falling and I couldn't believe that it was this rough. And I started to get worried about the breathing and ah what happened and then it kind of started to slow down and I started to get my

hands to my face to, and then boom I got hit again I just got fucking smacked down the mountain. JC: So it hits you down, covered in snow not breathing, slows, and then that sluff slowed and then something else released? JL: No I think it was a lull like you turn sluff turn sluff so I think it was a bit of a lull. But I managed to work myself to the end of one of the sluffs but it was still like it was building up just it was pretty rough, and I continued to get beat down and beat down. JC: And could you breathe at that point? JL: No and I really go to the point and like you know we talked about that eighty footer to rock like I was in the air and I was like this is going to wreck me but I didn't think that I was dying. And but this one in Alaska I accepted the idea that I was going to die. Because it didn't it just seemed to rough I didn't know when it was going to stop. And I realized if it didn't stop soon then I was going to pass out and people were too far away and I knew all this and yeah it is done. What I found interesting about it is that as terrifying as it is or was it also seemed it was also kind of peaceful. Once I came to that realization I just kind of let it go. And all of a sudden violent, violent I kind of came to a stop, and then I come to a stop, I rip my helmet off and I am spitting up bloody snow, and getting the snow out of my mouth and out of my throat and I think thank goodness and I look down at my legs and it is like this (motions that his leg was at 90 degree angle mid way down his femur) I don't know one nasty angle in the middle of my quad. Which those because people talk about shock and oh my God that must have been rough? But compared to what I was going through at the time. JC: Prior to that? JL: Yeah I was like sweet. I thought I was going to come to and I was going to be destroyed I didn't know what to expect but ah. JC: Well wow you accepted death. JL: Yeah dude it was pretty wild.

## Appendix C

CONSENT FORM**An Exploration of the Success Elements of Elite Big-Mountain  
Freeskiers**

By agreeing to participate in this study, I, \_\_\_\_\_ understand that my involvement will consist of sharing personal information about my Big Mountain (BM) freeskiing experiences and the research will not pose any serious risk. The purpose of this study is to gain an understanding of the success elements I use while training and competing. I also understand that a long-term goal of this research is to use the information to help other BM freeskiers by developing knowledge in sport psychology that will be of value for consultants working with BM freeskiers.

I understand that this study will involve my participation in one open-ended, semi-structured face-to-face interview for approximately 90 minutes. Questions will involve the elements that have led to successful experiences in BM freeskiing, including competition and specific ski runs. I will discuss the skills surrounding my best performances and my less than best performances. I am also aware that for the purpose of clarification or additional questioning I may participate in a follow-up interview over the phone that will last up to 20 minutes. Both the face-to-face interview and the phone interview will be recorded in order to ensure accuracy during the data analysis process.

I understand that a pseudonym will be used to ensure my anonymity and that the master information sheet linking participants to a pseudonym will be kept in a separate locked filing cabinet (separate from the data) in Dr. Orlick's office so that no association between a pseudonym and a participant's identity will be possible. I am also aware that quotes will be used to support findings. I understand that to ensure the confidentiality of quotes and personal information the researcher will use pseudonyms, and where necessary minor alterations will be made. For instance, if a ranking in a particular competition or a specific location of a best performance is mentioned by a participant, this information will not be included in the quotation.

I understand that the researcher and his supervisor, Dr. Orlick, will be the only ones with access to the data. Audiotapes and transcripts will be kept in a locked cabinet in Dr. Orlick's office for five years after the data is published, after which they will be destroyed.

I understand that of my own will I am free to withdraw from this study at any time, including before, during or after the interview. I may also refuse to answer certain questions or to participate in certain aspects of this study such as verifying the transcript of my interview or commenting on the analysis of the preliminary findings. Any refusal or withdrawal by myself will be done so without any negative consequences.

