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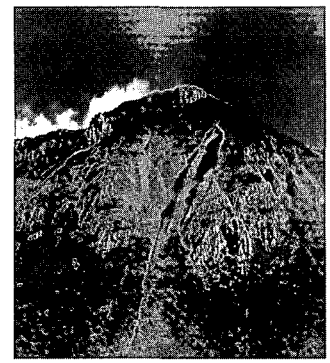

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The purpose of this study was to explore the mental strategies used by elite Mount Everest climbers to overcome obstacles while ascending and descending the mountain. Individual interviews were carried out with 10 climbers who have successfully reached the summit of Mount Everest. Common strategies of success were identified, as well as factors that created difficulty on the mountain. The themes of focus, mental toughness, short-term goals, drawing on past experience, connecting to one's body, feeling support from other climbers, and belief in personal capacities were seen to have importance in overcoming adversity on the mountain. These results support mental training as an effective tool for overcoming obstacles in the high stress environment of high altitude climbing.

The challenge of climbing Mount Everest, the highest mountain in the world (8848 m), has continued to gain popularity ever since Sir Edmund Hilary and Tenzing Norguays' first ascent to the summit in 1953.

The extreme sport of high altitude climbing has become an appealing challenge for increasing numbers of people (Shoham, Rose, & Kahle, 2000). For instance, during the past few decades, high altitude climbing without supplementary oxygen has become one of the most fascinating adventures for an increasingly large number of mountaineers, since an elite group of climbers conquered all 14 of the 8000 meter (m) peaks in the world (Cavaletti & Tredici, 1990). It is widely recognised that high altitude alone exacts a very heavy toll from a person's energy and resources, both physical and mental (Emerson, 1966). According to Bahrke & Shukitt-Hale (1993) lassitude, weakness, breathlessness and retardation of thought and action are the principal effects of high altitude and are always present over 5485 m. Furthermore, high altitude climbers are often exposed to environmental obstacles such as avalanches, and extreme weather conditions, or with internal barriers such as fatigue, intimidation, and loss of focus or will. High altitude climbing is a complex, high risk, endurance sport. It is assumed that mental strategies are required to stay alive and successfully complete the challenge.

The challenge of climbing Mount Everest, the highest mountain in the world (8848 m), has continued to gain popularity ever since Sir Edmund Hilary and Tenzing Norguays' first ascent to the summit in 1953. Every year, groups of mountain climbers from around the world set out to reach the top of the mountain; solo attempts are also made. An average climb to the top of Mount Everest takes two months, including periods for rest and acclimatization. It requires about a week of trekking through the mountains just to reach base camp. Once climbers have set up camp at the base of the mountain, they will go through four more camps (one, two, three, four) and then try to reach the summit. After reaching a camp (one, two, and three), the climbers will return to the previous one (for a couple of days) to allow their bodies to properly adjust to the altitude. The final push to the summit requires that the climbers wait for a window of opportunity, due to the weather, and attempt to climb from camp four to the summit. Only a small percentage of people who set out to climb Mount Everest successfully reach the summit. Some reasons for failure include death, high altitude sickness, loss of will, injury, fatigue, and extreme weather conditions. According to Egan and Stelmack (2001), over 300 climbers making this attempt died in pursuit of this dangerous test of skill and courage. With the inherent risk and potential for serious injury or death, it is

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assumed that tremendous physical endurance and mental strength are essential for such a climb to be successful.

Previous studies have largely ignored the mental strategies used by elite climbers to overcome the obstacles associated with high altitude climbing. The majority of research on mountain climbers has focused on sensation seeking needs (Breivik, 1996; Freixanet, 1991; Rossi & Cereatti, 1993) and on the personality profiles of climbers (Breivik, 1996; Freixanet, 1991), as well as on the psychological effects of high altitude (Missoum, Rosnet, & Richalet; Ryn, 1988). Research on the mental strategies adopted by high altitude climbers is lacking and warranted. By exploring the specific mental strategies used by elite high altitude climbers, it is expected that insight will be gained that may help not only climbers, but also top performers in other high-risk and high stress domains.

Elite athletes across a wide range of sports have been found to possess certain mental strategies related to exceptional levels of performance. In a study carried out by Orlick and Partington (1988), statistically significant links were found between Olympic performance outcome and certain mental skills among elite athletes in 23 summer Olympic games events. Common elements of success were identified as quality training, setting clear goals, imagery, simulation training, mental preparation for competitions, focus, and on going learning. Elite high altitude climbers are a special population of athletes who perform at a high level. The above mentioned mental components have been found to help elite athletes excel in a variety of athletic domains and may provide valuable insight into the mental strategies used by high altitude climbers.

Associative strategy is related to enhanced performance in long distance running (Patrick & Hrycaiko, 1998; Schomer, 1986, 1986; Silva & Applebaum, 1989; Tammen, 1996). Compared to dissociation, by which an athlete shuns sensory inputs because of the discomfort they may create, associative strategy is defined as thought processes where the athlete focuses on internal sensations such as body awareness and muscular tension. (Schomer, 1986). Long distance runners adopt the mental strategy of association to cope with the immense effort involved in completing a marathon (Schomer, 1986). According to Patrick and Hrycaiko (1998), associative strategy allows runners to focus on internal body sensations such as breathing, muscle tension, and race strategy. Tammen (1996) examined whether the pace of the run would influence the associative or dissociative coping strategies used. Eight long distance runners ran four trials at an increasing sub-maximal pace, and one trial at maximal pace. Using the Mental Readiness Form, a tool used to measure feelings and thoughts after the cessation of each run, and the Borg scale, a numerical instrument used to rate the athletes perceived exertion, Tammen found that as the pace of the subjects increased the runners associated more. As the pace increased, the subjects noticed that their thoughts changed. They focused more on their internal body sensations as feedback towards performance.

Long distance running is an endurance sport that requires intense effort and concentration for prolonged periods of time. It has similar components to mountain climbing in that both sports require many hours of sustained effort, endurance and discomfort. Elite runners mainly use associative coping strategies when running long distances. They have been found to focus on their internal bodily sensations while employing mental skills, such as self-talk to remain concentrated on what they are feeling. Staying in touch with how one feels, even under the most difficult circumstances, may be a skill that elite climbers also use to overcome the hardest parts of the climb. Research findings on psychological functioning and marathon running (Schomer, 1986; Silva, 1996; & Tammen, 1996) may have direct implications for individuals who climb 8000m peaks.

In summary, the purpose of this study was to explore the mental strategies used by successful Mount Everest climbers to overcome obstacles while climbing on the mountain. Each climbers' experience with: a) making the ascent from base camp to camps 1, 2, 3 4, and reaching the summit, b) making the descent from the summit to base camp, and c) overcoming obstacles on the mountain were explored.

It is anticipated that the insights of elite Mount Everest climbers will increase our understanding of the role of mental strategies in the achievement of difficult goals, and on the process of overcoming significant obstacles faced by athletes in various high-risk performance domains. The insight gained may be of practical value for high altitude climbers and other performers in pursuit of excellence. Furthermore, these findings may enable expedition leaders and sport psychologists to work more effectively with climbers and the potential obstacles that can hinder success on the mountains.

Method

Participants

Male (n=7) and female (n=3) elite Mount Everest climbers participated in this study. Participants successfully reached the summit of Mount Everest at least once. At the time of data collection these athletes had reached the summit once on the average and had attempted the summit for an average of two times. Their age ranged from 29 to 65 years (M=38.2) at the time they reached

the summit. The participants included one solo climber, three expedition leaders, and six climbers from various group expeditions. In terms of country of origin, four of the participants were from Canada, four from the United States of America, one from Sweden, and one from Pakistan. The average time from when the participants climbed the mountain and when the data was collected was 4.5 years.

Design and Procedure

The present study involved conducting in-depth, semi-structured interviews guided by an interview guide. This type of methodology was considered appropriate for the following reasons: (a) Interviews provide an opportunity for the researcher to capture the richness and complexity of the subject matter, such as elite athletes` mental strategies. (b) Interviews allows for the participants' experience to be heard in a detailed, profound and vivid manner, which may not be captured by means of other types of methods. (c) Interviews scheduled at the athletes` convenience increase the probability they will participate in the study.

The interview guide included 11 main questions, each question followed by several probe questions. The questions were predominately open ended which enabled participants to express themselves without feeling constrained by yes or no answers.

As part of the current research, two separate pilot interviews were conducted. Two male mountain climbers who successfully reached the top of Mount Everest at least once were asked about their Everest experience. Using an in-depth, semi-structured interview, participants were asked to describe and explain their experience ascending to the summit of the mountain, descending to base camp, and the obstacles they faced along the journey. The pilot interviews helped support the importance of studying Everest climbers and their mental strategies. The information gathered from both participants revealed the importance of mental strategies and psychological strength in order to complete a high-risk adventure such as this.

Interviews were conducted from September through December 2002. This included ten, 60–90 min recorded interviews with each participant. To arrange the interview, the researcher sent a letter explaining the purpose and significance of the study, assuring confidentiality, and making the participant aware that the researcher would be contacting him or her to determine a convenient time for the interview to take place. It is important to note that initially, participants were asked to provide names of other people who have successfully reached the summit of Mount Everest. The reason for this type of snowball sample is the fact that the number of people who reach the top of Mount Everest is limited, and climbers are a good source for reaching other climbers.

Interviews were either conducted face-to-face, over the telephone, or through text-messaging over the Internet. All interviews were recorded and subsequently transcribed. Participants were told that the reason for taping the interview was so the researcher at a later date could analyse the data.

Data Analysis

The purpose of the data analysis was to understand and accurately report the participants' experiences and realities, particularly with respect to the role that mental strategies played in a successful climb. The initial step in the qualitative data analysis involved absorbing the researcher in the process of transcribing each interview. The researcher personally transcribed all of the interviews. Conducting the interviews, listening to the interview tapes prior to transcription, as well as reading the interview transcripts were also opportunities for data analysis (Maxwell, 1996). The next step was to send back the transcribed interview to each participant for authentication. Once the interviews were sent back to the researcher each transcript was re- read and then highlighted where mental strategies were mentioned or discussed (Orlick, personal communication, 2002). The next step was to extract information pertaining to mental strategies and assign a temporary name or label to each piece of that text. Memos were written often during the process of data analysis as they captured the researchers' thinking about the data, facilitated such thinking, and documented the decision-making process (Rubin & Rubin, 1995).

The next step in the process of analyzing data was categorizing. The traditional approach, using paper and pen to code data was implemented. Coding is the process of classifying individual responses into categories that bring together similar ideas, concepts, or themes (Rubin & Rubin, 1995). An inductive method of data analysis was implemented to group together common themes and concepts. General categories and sub-categories were created. Finally, comparisons and contrasts between each category were made (Creswell, 1994).

Results

Results from the 10 participants revealed that successful Everest climbers used various mental strategies to overcome obstacles while ascending and descending the mountain. In the subsequent sections themes are presented and discussed in conjunction with direct quotes from the climbers in order to present the participants' perspectives in their own words. The main mental strategies that are discussed are divided into two phases of the

climb as expressed by the participants: the ascent and the descent.

The Ascent

The successful Everest climbers used various mental strategies on the climb to the summit of the mountain. Participants were asked what they were thinking and feeling from the time they left base camp to the moment they reached the summit. Furthermore, participants were asked to define the obstacles they faced and how they overcame them to reach their ultimate goal. The results reveal that successful Everest climbers rely on focus, short-term goals, mental toughness, connecting with one's body, belief in personal capacities, feeling support from other climbers, and drawing on past climbing experience to help overcome obstacles and reach the summit. Examples of obstacles faced during the climb included oxygen depletion, high winds and cold, exhaustion, fear, and conflict with other climbers.

Focus

All 10 participants spoke of using the strategy of focus to help them perform through obstacles during the climb to the summit of Mount Everest. Focusing included directing physical and mental energy on the immediacy of climbing the mountain. Focusing allowed the participants to eliminate distractions, to keep concentrated on the task at hand, and to achieve specific objectives.

> Very few times on Everest would I ever let emotion in. Down in base camp, hanging in my tent, I would have memories of my wife and son, such as cards or letters. That was a safe point. You could allow your guard down. On the mountain you couldn't. There was too much responsibility for you and for others. You had to stay focused to stay alive and reach the summit. To know me is to know that you won't find a more competitive, focused, and determined person (climber 1).

Focusing on the task at hand helped climber 7 eliminate thoughts of self-doubt.

> And I remember very distinctly one night I felt like I had been dragging a very heavy bag behind me all the way up to the summit. And that was difficult, the burden which created doubts within me. As I committed myself to the technical climbing on the yellow band, I cleared my mind of all the doubts. There was no more room for those doubts. What I got instead was a clear, singular, directed focus that allowed me to continue on (climber 7).

Short-Term Goal Setting

Eight of the 10 climbers spoke of the importance of setting short-term goals while climbing on the mountain. Participants set specific, relevant daily goals throughout the entire expedition. Setting short-term goals were crucial in succeeding on the mountain. This mental strategy enabled participants to remain focused on the task at hand and not become overwhelmed by the experience. Finally, short-term goals helped the participants stay committed and motivated to the ultimate goal of reaching the summit and coming back down alive.

> Set yourself a goal but also set yourself realistic goals along the way and be satisfied once you have achieved those smaller goals. I was satisfied, I told myself you know I made it to camp 3, 23 500 feet higher than I have ever been before, and if this is my summit then I am going to walk away happy. I will try and go for camp 4 and I will try and reach the summit but if it doesn't happen for whatever reason, I am not going to push the envelope so far that I won't be able to come back down alive (climber 10).

Feeling Support from Other Climbers

Working together with other climbers in pursuit of reaching the summit of the mountain was a strategy utilised by many of the participants. Four out of the 10 climbers overcame obstacles on the path to the summit with the encouragement and the strength of those climbers near by. Supporting one another and believing in one another was an important element in success on the mountain.

> Climbing Everest is like an aching tiredness that goes right into the depths of your soul and it is because you are spending so much time up high. It sucks the life out of you and eventually you will sit down and you won't get up. It happens often on Everest. I will tell you that mentally it is really important to have strong people around you who all have the desire to reach the summit. If you want to give yourself the best opportunity to succeed then the quality of people around you should matter. And, I am not saying quality in that they have to be morally upright or super happy all the time, what I mean is how strong they are in terms of mental strength, ability to climb, and being driven by the summit (climber 1).

Drawing on Past Experiences

Four of the 10 climbers talked about the importance of drawing on past climbing experiences to persist through the struggles and difficult moments on the mountain. Participants spoke about relying on past climbing experiences, by drawing out insights or lessons, to help them cope with tough conditions on the

mountain. Having previously climbed on other high altitude peaks, climbers gained a strong foundation of knowledge and wisdom and drew upon it when faced with life threatening or challenging times. Furthermore, field experience created a sense of confidence and certainty on the mountain. Climber 6 said "it was this cumulative experience and the lessons gained from the failures, epics, and hardships of past climbs that proved to be our most valuable asset and investment in tackling Mount Everest and coming back alive."

Belief in Personal Capacities

Closely tied to the strategy of drawing on past climbing experiences to overcome adversity on the mountain is the belief in one self. Four of the participants were confident in their abilities to make it to the summit and return safely. Believing in themselves allowed the climbers to stay positive and persevere when faced with obstacles on the mountain.

> I believed in my ability to make it to the top from day one, from the moment I made this decision three years ago. It was actually a dream of mine for 10 years. When I climbed Mount Aconcagua, somehow I just knew I could climb Everest. I never told anyone that I knew I could climb it. I didn't want to sound arrogant, but inside me, I seemed to know it. But then came obstacles, and so I had to decide how much I believed in my dream. Often I thought that it was not going to happen, you have run into a brick wall here, and a brick wall there. But I kept pushing on and I didn't give up on my dream. Sometimes you just need that belief in yourself to keep you going and to get through the obstacles. For example, at the Hilary Step I realised a goal of mine and that gave me the confidence to go after my next objective (climber 6).

For the most part climber 5 attributed his success on Everest to his belief in himself.

> I failed on Everest four times before reaching the summit on my fifth attempt. What made the fifth attempt different was that I really had the confidence that I could do it. I trained a whole lot harder and as a result I felt stronger physically. I think that was the major difference concerning my mental state (climber 5).

Connecting with One's Body

Six out of the 10 participants spoke of using the strategy of connecting to their bodies to help them persist through difficult phases on the mountain. Paying attention to their bodies allowed the climbers to focus on their internal body sensations and monitor their pace. More specifically, this mental strategy helped the participants maintain a slow but steady pace and regulate their breathing and body temperature. Furthermore, the possibility of developing altitude sickness while climbing on the mountain is great. Therefore, being aware of one's physical state at all times was crucial to staying alive.

> We have the next 9 or 10 hours of climbing to do so I just focused on my breathing and on my heart beat. I got into a zone and everything just started falling into place. Before I knew it I was just climbing, climbing like a machine playing music in my head. I paid attention to my heart beating as I played music in my head breathing and keeping the beat going. The hours would pass, one hour after the next trying to climb through the cold until finally the morning came (climber 10).

Participant 7 was not only aware of possible signs of altitude sickness, but she also altered her behaviour in response to the discomfort associated to climbing Mount Everest.

> Yes I experienced a great deal of discomfort. Altitude is discomfort. The first couple of times in altitude were the worst because I was unsettled and stressed by the discomfort. By the time I got to Everest I had got my acclimatization and my response to pain down to a science. In fact the strategy of living and thriving at altitude was part of the appeal of climbing in these big places for me. I learned to perceive pain as information not necessarily as the warning alarms we were programmed to think it was. I would respond to the information by slowing down, drinking more, altering my sleeping arrangements, or eating more. The biggest challenge was discerning the harmless pain from the warning bells. What is danger pain and what is just plain discomfort? More experience lead to more confidence in my ability to judge (climber 7).

Mental Toughness

Mental toughness was a mental strategy that was clearly evident in overcoming obstacles on the mountain. Eight climbers had the ability to endure the discomfort associated with high altitude and continue climbing. Climber 8 said "mental toughness is extremely important. Especially up high. It hurts up high and for some people it hurts a lot. Altitude is not a comfortable thing. So, you have to be mentally and physically tough otherwise you will turn around." Climber 7 expressed similar thoughts.

I would say that mental toughness is one of the most critical elements needed to climb high altitude peaks. It

really is not easy when you are above 7000 m, your body really isn't acclimatizing at that altitude so you are not feeling good, you are not sleeping well, and normally you do not eat well. Being strong mentally and putting up with the discomfort helps a lot with your success (climber 7).

The Descent

Climbing Mount Everest is not over until the climbers have returned from the summit of the mountain to base camp. Descending the mountain usually takes up to 2 days. Climbers will attempt to descend as far down the mountain as possible, however, they normally rest at camp 4 or at camp 3 before leaving the next day for base camp. It is clearly evident that mental strategies are not only employed as climbers ascend the mountain but they are also utilised on the descent.

Focus

Focus is one of two mental strategies used on the descent phase of climbing Mount Everest. Most of the participants said that because they were so tired and worn out after reaching the summit they had to spend of what remained of their energies on focusing on the task at hand. Some climbers believe that the ability to focus is even more important on the descent than on the ascent.

> It is even more important to focus during the descent because your body is not responding the way it should. You are so tired and depleted from the climb that staying focused on every step in front of you is crucial. Otherwise things like clipping a crampon can occur (climber 1).

Short-Term Goal Setting

Other than utilizing the mental strategy of focus five of the 10 participants spoke of setting short-term goals as they descended the mountain from the summit. Setting small, realistic goals helped the participants stay focused and committed to the experience.

> Setting short-term goals is really important when coming down the mountain. The goals I set were realistic. Because you are so tired and worn-out out on the descent it is crucial that you set these small goals so you don't become overwhelmed by the experience. You also need to monitor your reserves because climbing from the summit to base camp is long (Climber 4).

The mental strategies of focus and short-term goal setting were used by successful Mount Everest climbers to descend the mountain from the summit. These strategies helped the climbers overcome various obstacles and return safely to base camp.

Limitations of the Study

The detailed recall of the climbers was impressive, however it is likely that certain limitations in recall occurred when getting specific detail from the participants. This is a limitation when an extended period of time has passed between the time the climbers were on the mountain and when the interviews were conducted. The most valuable and ideal method to get as close as possible to the real experience of high altitude climbing is for the researcher to immerse himself or herself in the context and be on the mountain with the climbers as they perform. This method of collecting data was not possible for this study due to financial and time restrictions.

The number of people who reach the top of Mount Everest is limited. Therefore, a sample of 10 is acceptable in a qualitative study such as this one. However, seven out of the 10 participants were interviewed over the telephone and one over the Internet, which may have been a limiting factor. In phone and internet interviews, conversational cues can be missed, making for difficult interviewing under the best of circumstances (Rubin & Rubin, 1995). To maximize detail and depth on the telephone, the researcher ensured that each participant knew that what they had to offer was important, that the researcher was an appropriate person for them to talk to (a Master's student at the University of Ottawa) and was knowledgeable about the sport of high altitude climbing, and that the researcher required detailed information.

Discussion

High altitude climbers have been previously well researched from two major perspectives; their physiological and psychological adaptation to high altitude and their personality profiles. However, although mountain climbers have emphasized the importance of mental strategies and preparation in anecdotal reports, very little research has been conducted on the topic. The current study was the first to explore the mental strategies used to perform in the high-risk sport of high altitude climbing.

It is clear that climbing Mount Everest is an extraordinary physical, mental, and emotional test. With the constant threat of danger, and potential death, high altitude climbing differs greatly from many other sports. The climbers mind must learn to cope with danger, death, sleep deprivation, cold, fatigue, avalanches, and various other potential setbacks for over a 2-month period. It was fascinating to learn how well the successful Mount Everest climbers in this study applied the various mental strategies in such extreme circumstances. In my opinion, this study only opened the door to the mental strategies used

in the sport of high altitude climbing to overcome obstacles such as these. As a result of talking at length with each climber, it became very clear that success on Mount Everest is very much about having the proper mindset as well as strong mental skills to perform while climbing on the mountain. Obviously, being physically strong, having the required technical skills, and being prepared logistically are also important aspects needed for a successful summit. However, most of the climbers emphasized that what separated them from many of the climbers who have not succeeded on Everest was their mental strength and their ability to apply mental strategies during hardship.

Mental strategies used by elite athletes in various other sports are well documented. High-level athletes have been found to use various mental strategies to enhance performance during competition. Some of the mental strategies used by the elite climbers in this study, all of whom successfully climbed Mount Everest, are similar to the mental strategies used by elite athletes in various other sports.

The results in the ascent phase of climbing Mount Everest provide support for Orlick's (1996) seven critical components of personal excellence. Orlick's Wheel of Excellence represents a conceptual framework for the pursuit of excellence based on the results of in-depth interviews with world-class athletes (Orlick & Lee-Gartner, 1995; Orlick & Partington, 1988), as well as ongoing work with individuals engaged in other high performance pursuits (Orlick, 2000). The seven elements of excellence in the model include commitment, belief, positive imagery, mental readiness, full focus, distraction control, and ongoing learning. As the Mount Everest climbers successfully met the challenges of the mountain, they spoke of the importance of using all of the elements from the Wheel of Excellence to help them overcome obstacles on the path to the summit. These mental strategies enabled the high altitude climbers to reach the summit and return safely to base camp.

These climbers also utilized a specific mental strategy during the ascent- connecting with their bodies- which was found to be related to enhanced performance in long distance running (Patrick & Hrycaiko, 1998; Schomer, 1986; Silva & Applebaum, 1989; Tammen, 1996). Many of the successful Mount Everest climbers in this study connected with their bodies to succeed with the immense effort involved in reaching the summit. There was continual self-monitoring with respect to how the climbers were feeling internally. It is possible that the reason climbers are in touch with the physiology of their bodies when climbing is so they do not get sick to the point that they may lay down and never get up. With the high risk of developing high altitude sickness and climbing in a diminished state of mind, climbers need to listen to their bodies and be aware at all times of potential symptoms of high altitude.

Furthermore, the elite Mount Everest climbers in this study utilized various mental strategies found in other high demanding performance domains. In a study carried out by Orlick (1999) an astronaut who was the first Canadian to fly as a mission specialist, to pilot a docking with the Russian space station, and to operate the Canadarm in space was interviewed. The purpose of the interview was to explore the mental strategies used by the participant to excel in this high demanding pursuit. The results revealed that detailed preparation, focus, imagery, and on-going learning were used as strategies for success. An example of preparing fully for space flight included figuring out what it is you are trying to do and having a clear picture of that goal, followed by developing a clear picture of what you can do for all the possible things that can go wrong (Orlick, 1999). Similarly, high altitude climbers need to develop a plan ahead of time to successfully overcome potential setbacks. In a high demanding environment like climbing Mount Everest there is little time to think in a dangerous situation. Climbers need to react immediately to overcome obstacles.

In another study conducted by Orlick (2001) a cardiothoracic surgeon was interviewed for the purpose of exploring the mental strategies used to perform and deal effectively with the element of uncertainty in the high demanding domain of surgery. The mental strategies found by Orlick which are similar to climbing Mount Everest included focus, belief in oneself, and teamwork.

Orlick's (1999, 2001) results are based on one participant, which is a limiting factor. The similarities, however, between the performance domains of flying a space shuttle, performing surgery, and climbing Mount Everest are clearly evident. Achieving the difficult goal of excellence in surgery, space flight, or high altitude climbing includes elements of extreme risk, stress, and high demands. The results of this study on mental strategies of elite Mount Everest climbers are somewhat linked to the sport of high altitude climbing however, it is interesting to note the similarities between climbing Mount Everest and other high demanding performance domains with respect to mental strategies and excellence.

It is fascinating the impact that mental strategies have on the success of climbing high altitude peaks. Many of the participants said that success on Everest is 70% mental, yet so little is known about what it takes mentally to reach the peak and return home safely. As the climbers spoke about the importance of not focusing solely on the summit but also on returning home safely, they touched on the importance of using mental strategies to descend the mountain. It was made clear in the interviews that

once an Everest climber reached the summit they were mentally, emotionally, and physically exhausted. Therefore, they needed to use the strategies of short-term goals and focus to return safely to base camp. Focus is needed so that the climbers do not make a mistake such as clipping a crampon as a result of feeling extremely fatigued. Short term goals help climbers stay focused and it is possible that they force the climber to continue descending the mountain despite the pull to sit down and go to sleep.

Conclusion

Various mental strategies are used to successfully reach the summit of Mount Everest and return home safely. While ascending the mountain, successful climbers use the strategies of mental toughness, focus, short-term goals, connecting with one's body, feeling support from other climbers', drawing on past experience, and belief in personal capacities to overcome obstacles. They also use short-term goals and the strategy of focus to overcome obstacles while descending the mountain. Much has been learned on the mental strategies used to achieve excellence in the sport of high altitude climbing. This study contributes to existing literature on mental strategies used while climbing high altitude peaks. The insights of elite Mount Everest climbers increase our understanding of the role of mental strategies in the achievement of difficult goals and on the process of overcoming significant obstacles faced by performers in various high stress domains. Hopefully, the insights gained will be of practical value for sport psychologists, expedition leaders, high altitude climbers, and other performers in pursuit of excellence.

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