

## **Abstract**

Within the world of elite alpine ski racing, there are numerous examples which show that skiers' ability to cope with competitive stress fluctuates. The overall aim of this thesis was to gain insight into why and what happens when high-level alpine ski racers cope with competitive stress and why and what happens when they do not. Moreover, to get insight into the factors which are associated positively and negatively with the ability to cope with competitive stress. Seven female Scandinavian high-level alpine ski racers (mean age = 18.6) participated in an Interpretative Phenomenological Analysis interview (IPA; Smith, Flowers & Larkin, 2009) regarding their 'lived experiences' pertaining to one stressful competition in which they coped and one in which they did not cope. The skiers highlighted a long list of training and preparation variables, team variables and personal variables which affected their ability to cope positively and negatively in the respective competitions. Positive training and preparation variables included successful training sessions and/or races and meeting expectations, whereas tumbling into a technical, physical or psychological slump and not meeting expectations were seen as negative training and preparation variables. Positive team variables included feeling confident in the team, belonging to a high-ability team, having confidence in one's team and receiving social support from the coach, whereas feeling the coach had lost faith in the skier, being exposed to overly controlling coaches and a lack of teammates' support were identified as negative variables. Finally, a large number of personal variables were identified in this study. The variables having a strong belief in success, possessing high relative competence, being task focused, having high perception of control and having an unwavering trust in one's abilities were identified as positive personal variables. On the other hand, skiing beyond one's capacity, possessing a high belief in failure, giving up, pushing too hard and exaggerated preparations were identified as negative variables. The results of this thesis are discussed in terms of the Cognitive Activation Theory of Stress (CATS; Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) as well as a number of other relevant theories.

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## 1. Introduction

This thesis sheds light on the psychological aspects of alpine ski racing. This is a sport in which the overall goal is to ski as fast as possible from start to finish, and a winner is announced on the basis of who achieves the fastest time. The differences between those who go up on the podium and those who stand beneath it are often marginal, especially at the Europa Cup and World Cup levels. Any mistake made in the course, whether great or small, can cost significant tenths of seconds, and can consequently spoil the day for the athlete. To perform at the highest level it is therefore important that the ski racer has developed a good technique which makes it possible to ski fast but also be less prone to making errors.

The sport comprises four main disciplines: slalom, giant slalom, super G (or super giant slalom), and downhill. Slalom is the most technical discipline as the turns are the shortest and fastest. Giant slalom is the second most technical discipline with a slightly longer length of turns and higher speed. Common to both is the fact that they are raced over two runs; the sum of the times raced determines the winner. This contrasts with super G and downhill in which there is only one run. On the other hand, this run is considerably longer than those in slalom and giant slalom. Super G is a speed event with even longer turns and more speed, and forms the crossover between giant slalom and downhill. Finally, downhill is by far the fastest discipline with the fewest and longest turns.

It has been 35 years since Gallwey and Kriegel (1977) taught us about the inner game of skiing and how skiing could be improved by taming Self 1 and trusting Self 2.

According to their inner game approach, each skier occupied two selves ("voices") that did not coexist happily. Self 1 represented the warning finger that criticised and instructed everything Self 2 did or should have done, i.e. bend your knees, you have to edge more, that was a bad turn, and you are untalented. Self 2, on the other hand, was the instantaneous awareness and high confidence state that knew how to ski, which was truly present when we performed at our best. It was when skiing became smooth, effortless, rhythmic and floating. But when Self 2 was overwhelmed by the voice of Self 1, trust in one's abilities was undermined and we skied worse. Therefore, the aim

of the inner skiing approach was to quiet the voice of Self 1 and to trust Self 2, which would result in better skiing.

Gallwey and Kriegel's (1977) book is regarded as a renowned classic, which paved the way in shedding light on alpine skiing from a psychological point of view. Arguably, the book will never be out of date. The authors starting point was that "skiing is more than a parallel turn" (p. 4). They did not tone down the importance of technique in order to perform well, but argued that it is generally not the "external conditions nor lack of technical expertise that prevents us from skiing at its best, but the doubts, fears, and thoughts within our heads" (Gallwey & Kriegel, 1977, p. 5). Thus, they argued strongly that the mental aspects of skiing also mattered to the performance. Since this book was published, to my knowledge<sup>1</sup>, few have followed in studying alpine ski racing from this angle. The overall aim of this thesis was therefore to again adopt the "skiing is more than a parallel turn" approach and study alpine skiing from a psychological point of view.

A subject that has attracted ski coaches as well as my own interest in recent years is how best to tackle competitive stress. This topic reflects a keen interest in making skiers better able to bring out their best in races, especially when it counts the most. It is widely accepted that the ability to cope with stress is an integral part of performing well in competition (e.g. Dugdale, Eklund & Gordon, 2002; Nicholls & Polman, 2007), so a deeper understanding of this subject might be of interest to skiers and their coaches.

Within the world of elite alpine ski racing, there are numerous examples that show that the ability to cope<sup>2</sup> with racing stress fluctuates within the same skier, i.e. a skier may cope well with competitive stress in one race, during one part of a season, or a whole season, but fail in the next, and vice versa. It is certainly not uncommon that skiers' experience races in which they easily cope with racing stress, and other times when they cannot. Consequently, an interesting question is: Why? What makes a skier able to cope

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<sup>&</sup>lt;sup>1</sup>Some research has been conducted on alpine skiers and the psychological experience of returning from injuries (e.g. Bianco, Malo & Orlick, 1999; Gould, Udry, Bridges & Beck, 1997). But several searches in SPORTDiscus, ScienceDirect, and PubMed, with the keywords "alpine skiing" and "sport psychology" gave only a small number of hits.

<sup>2</sup> Coping is in this thesis understood as the result of whether we tackle stress well or not.

in one race but not in another, and what are the differences between the two situations? What are the factors which undermine the ability to cope with competitive stress and what are the factors which enhance it? The aim of the thesis was to gain insight into these issues.

In sport psychology literature there are at least two available conceptual frameworks that could help to shed light on these questions, but they do so in very different ways. They are also sworn to two widely different coping concepts.

# 1.1 Coping as a strategy to cope? The current puzzle in sport psychology

Coping in sport is usually associated with an act or a strategy employed when individuals are faced with stress. Thus, what are the best strategies for coping with stress in sport? This is a puzzle which several researchers in sport and exercise psychology have attempted to solve in recent years (see Nicholls, 2010; Nicholls & Polman, 2007).

This paradigm follows Lazarus and Folkman's (1984) coping definition as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resource of the person" (p. 141). Thus coping means everything the individual does in order to deal with the stressful event, regardless of whether it is effective or not. This is the definition used in the transactional process perspective (Lazarus, 1999; Lazarus & Folkman, 1984). A key element in this theory is that we constantly appraise our environment and ourselves, which corresponds to primary and secondary appraisal. Primary appraisal is a person's evaluation of the situation, which can be framed in damage/loss, the possibility that damage/loss lost may occur (threat), or an opportunity for development and growth (challenge). If any of these happen, a secondary appraisal evaluates what can be done in order to deal with the stressful situation. Specifically, what are the strategies available for coping?

Lazarus and Folkman (1984) distinguish between two overarching classifications of coping strategies: problem-focused and emotion-focused. Problem-focused coping aims at abolishing the source of stress, whereas emotion-focused coping attempts to regulate

the emotional response of the situation. Lazarus and Folkman argue that neither of these is initially better than the other, but that their effectiveness is determined by the fit between reality, and the appraisal of it, and the appraisal and the strategy used for coping (the goodness-of-fit approach). This is by far the most commonly adopted theoretical framework in sport psychology (Nicholls & Polman, 2007) and has received some support (e.g. Kim & Duda, 2003).

According to this approach, alpine ski racers' will tackle competitive stress well if the coping strategies they use fits with the competitive situation and the appraisal of it, and secondary appraisal and the strategy used to cope with the stressor. On the other hand, they will not tackle competitive stress well if there is a mismatch in any of these.

In the wake of Lazarus and Folkman's (1984) stress approach, a number of others explanations have been put forward to account for the effectiveness of coping strategies (see Nicholls, 2010). Some accounts argue that certain coping strategies are inherently more effective and others more ineffective. Others have suggested that it is the automaticity or choice of coping strategy that matters on how effective they are. However, in his review of coping effectiveness in sport, Nicholls (2010) suggested that all coping effectiveness approaches are imperfect: "It appears that there are flaws in all of the models, theories, approaches, or explanations of coping effectiveness" (p. 274). Although this is the puzzle that most researchers in sport acknowledge (Nicholls & Polman, 2007), it is also argued that we have tried to solve the wrong puzzle (Eriksen, Murison, Pensgaard & Ursin, 2005). Eriksen and colleagues have claimed that it is not the use of strategies but a person's belief in being able to cope that is relevant:

We suggest that the type of strategy is not the main issue in sports either. It is the expectancy of the result that is important. We believe that it is irrelevant whether a tennis player, for instance, is using active strategies (which are often regarded as "adaptive strategies") or avoidance strategies (which are often regarded as "maladaptive" strategies). The key question is whether the player has a positive response outcome expectancy or not (p. 936).

Moreover, another argument is that there is no relationship between the stress level of a person and the strategies used (Levine & Ursin, 1991; Ursin & Eriksen, 2004). This leads us to the other coping meaning and conceptual framework that has recently gained a foothold among European stress researchers (Ursin & Eriksen, 2010).

# 1.2 Coping as a "switch" that turns the stress alarm off? The Cognitive Activation Theory of Stress (CATS)

The second available coping variant is found within the Cognitive Activation Theory of Stress (CATS; Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), and is defined as a Positive Response Outcome Expectancy (PROE). In the CATS, people cope when they expect to tackle the situation with a positive result. The essence and virtue of this coping concept can best be described as a "switch" that reduces or turns the stress alarm off. A study of Norwegian military applicants (Ursin, Baade, & Levine, 1978) was the first study to demonstrate the validity of this coping concept in humans. When learning to perform real aeroplane parachute jumps the applicants had to perform several simulated tower jumps. High levels of stress were reported on the first jump, but the level decreased for the second and continued to decrease in accordance with the number of jumps the person performed. This was because the person had demonstrated to him/herself that s/he was able to master the task, thus establishing PROE (Ursin et al., 1978).

According to the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), "stress" is a multidimensional concept integrated in "a complex system with feedback and control loops" (Levine & Ursin, 1991, p. 4). It is this system that determines whether the stress alarm should be switched on or off. The CATS comprises four components of "stress": the stress stimulus, the stress experience, the stress response ("the stress alarm") and the feedback from the stress response (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). The stress response (or alarm) is simply an unspecific neurophysiological arousal that increases every time the brain wants us to pay attention to crucial stimulus in our environment. We are not able to be aware of everything in our lives, but the brain helps us by singling out the most critical things, and elicits the stress alarm to turn our attention toward them (Eriksen & Ursin, 2006). The stress alarm is an integral part of humans' safety system which the brain activates every time any be value (Set Value (SV); the expectancy of what should happen) is out of tune with the is value (Actual Value (AV); what is happening in reality). These be and is values could be anything from "osmotic pressure to the social climate" (Eriksen & Ursin, 2006, p. 48). If, on the other hand, the be (SV) and is (AV) value are in tune, the stress alarm is turned off (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

The CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) puts forward that the stress alarm can be activated in two different ways: the brief anabolic training mode of the stress alarm and the sustained catabolic strain mode of the stress alarm. Eriksen and Ursin (2006) compare the training effects of stress as the same as any physical activity to do with our body. It breaks us down, but recovery from it makes us stronger. It is a short-lasting activation in arousal (i.e. heart rate increases), which is beneficial for health (Eriksen & Ursin, 2006). On the other hand, the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) opines that the sustained activation mode of the stress alarm is problematic, which evokes the negative health aspects commonly associated with stress. Whether the alarm is activated or not and the mode of stress activation is determined by the answers to the two questions that the brain asks when we are with any form of challenge or threat: what does the stress stimulus mean and what can I do about it? These two questions are an integral part of the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) feedback and control loop system, and are the primarily regulators of the stress alarm.

The brain: what does the stimulus mean? The CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) claims that individuals are able to distort the meaning of the stress stimulus by cognitive defence. Since the meaning of the stimulus is downplayed, the stress stimulus is stopped and does not get access to the alarm-realising mechanisms. Consequently, the stress alarm remains off.

The brain: what can I do about it? In the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) there are three alternative answers to this question. If the answer is "all my responses lead to a good result ("PROE"), the stress alarm is turned off or activated in training mode of stress if we are faced with a difficult task. PROE is underpinned by having a high perception of control, which in the CATS is defined as "an acquired perceived high probability of a given response outcome, regardless of the value of the outcome" (Ursin & Eriksen, 2004, p. 580). This involves high acquisition strength ([H] habit value), and a high degree of perceived probability (PP) that responses would lead to the expected outcome (Bolles, 1972). As the definition implies, however, control can be either negative or positive, which corresponds with the affective value [A](Eriksen & Ursin, 2006). For PROE, this is of positive significance.

The two other alternatives to the brain's questions are hopelessness and helplessness, and both are associated with the straining effect of the stress alarm. Hopelessness also involves control, but the affective value (A) points in a negative direction. In other words, hopelessness occurs when the individual has learned that most or all responses lead to a bad result (Eriksen & Ursin, 2006). On the other hand, helplessness differs from both coping and hopelessness in that the individual lacks control. This occurs when the individual is certain that his/her response has no effect on anything (Eriksen & Ursin, 2004). This concept originates from the theory of learned helplessness (Overmier & Seligman, 1967; Peterson, Maier, & Seligman, 1993; Seligman, 1975). Overmier and Seligman (1967) showed that dogs previously exposed to uncontrollable shocks, occurring independently of the dogs' responses, learned that no matter what they did to avoid the shock it did not have any effect. This response learning had an unfavourable carry-over effect to a new training situation when it was possible to avoid the shock by avoidance behaviour. Even if it was possible to avoid the shock by performing an action, the dogs simply sat passively and waited for the shock to occur.

According the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), whether or not skiers' are able to cope with competitive stress depends on their acquired response outcome expectancy. If it is coping (PROE), the stress alarm is turned off or activated in a short-term manner. If it is hopelessness or helplessness, the stress alarm is activated in a sustained manner. The CATS therefore accounts for the psychological mechanisms that enable skiers' to cope with stressful competition, or, alternatively, that do not (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

## 1.3 Brief comparison of the CATS' PROE and self-efficacy

Self-efficacy is a concept with which we are very familiar in sport psychology (Feltz, Short & Sullivan, 2008). In sport self-efficacy has often been associated with athletes' belief about what they can accomplish with their skills, rather than the skills themselves (Bandura, 1997; Feltz et al., 2008). Bandura (1997) defined self-efficacy as "beliefs in one's capabilities to organise and execute the courses of action required to produce given attainments" (p. 3). A person's self-efficacy has been shown to be related to the activities they choose, the goals they adopt, the effort they exert, their thought patterns and emotional reactions, and their performance in these activities (Feltz et al., 2008).

The CATS theorists argue that self-efficacy and PROE are very similar and overlapping concepts (Eriksen & Ursin, 2006; Reme, Eriksen & Ursin, 2008; Ursin & Eriksen, 2004). They argue that a unique feature of PROE is that it tends to generalise from one situation to others. If self-efficacy does the same, and is also attached to a stressful situation, the two can be quite similar (Reme et al., 2008). Yet there are some remarkable differences according to Ellen Skinner's (1995, 1996) agent-means-end theory. In this framework there are three competence-related beliefs: strategy beliefs (means-end), capacity beliefs (agent-means), and control beliefs (agent-end). Strategy belief refers to what means are necessary to produce a result. Capacity refers to whether a person has access to the means. For example, alpine ski racers know that, to win races, they have to ski fast (strategy), but they may also believe they can be fast (capacity). Finally, control refers to a whether person believes s/he can be successful or avoid being unsuccessful: "Control beliefs are equivalent to a combination of strategy and capacity beliefs. If one has the capacity to execute an effective strategy then one has control" (Skinner, 1995, p. 32).

Biddle (1999) analysed self-efficacy within this framework and showed that it is strongly connected and most often associated with a capacity belief (e.g. I can ski fast). But in line with Bandura's (1997) development of self-efficacy theory, it has begun to reveal itself as a control belief. Hence, self-efficacy might best be understood as a capacity belief, with a slight orientation towards control belief. On the other hand, Pensgaard and Duda (2002) analysed the PROE concept and argued that it is a complete control belief, thereby including both capacity and strategy beliefs. Therefore, "PROE is more than self-efficacy. That is, it is a belief that incorporates both outcome expectations (i.e., the outcome is expected to be positive) and a self-efficacy belief (i.e. the person believes she/he can do it)" (Pensgaard & Duda, 2002, p. 221). Thus, self-efficacy can best be understood as a capacity belief, whereas PROE is a control belief that also includes self-efficacy.

#### 1.4 Aims of the thesis

As evident from the previous section, it is at least two available conceptual frameworks that can help to shed light on why and what happens when high-level alpine ski racers cope with competitive stress and why and what happens when they do not. However, they do so in very different ways and with very different coping concepts. One approach

believes that it the strategies chosen that counts, whereas the alternative argues that the strategies in themselves are immaterial, and that it is the athlete's response outcome expectancy that really matters.

Owing to these differences, and partly because, to date, little scholarly attention has been paid to the psychological aspects of alpine ski racing, I wanted to turn the question to the skiers themselves. Because high-level athletes have many years of competitive experience, they are often great "tools" in sport research if they are provided with an opportunity to talk about them (Dale, 1996). Thus in this thesis I provided high-level alpine ski racers an opportunity to talk about one stressful competition in which they coped and one which they did not cope with competitive stress. The overall aim of this thesis was to get insight into why and what happens when high-level alpine ski racers cope with competitive stress and why and what happens when they do not. Moreover, it was to gain insight into the factors which were associated positively and negatively with the ability to cope with competitive stress. By adhering to skiers' own view on why they did and did not cope with competitive stress, this thesis could get insight into which of the two theoretical frameworks that can best account for why skiers cope or do not cope with competitive stress.

## 2. Method

In accordance with the overall aim of this thesis, an in-depth phenomenological interview was necessary. One such approach is the Interpretative Phenomenological Analysis (IPA; Smith, 1996; Smith & Osborn, 2008; Smith, Flowers & Larkin, 2009). The aim of IPA is to shed light on people's lived experience with a phenomenon of interest, and offer an approach whereby these can be analysed in a detailed and systematic manner. To this end, IPA builds on three philosophical cornerstones: phenomenology, hermeneutics, and ideography (Smith et al., 2009).

IPA is a qualitative approach founded on phenomenology (Smith et al., 2009). Different phenomenological stances are available (see Allen-Collinson, 2009; Kerry & Armour, 2000), and can be plotted on a continuum ranging from the purely descriptive towards the more interpretative (Finlay, 2009). IPA posits that hermeneutic work is required to unveil and make sense of a phenomenon, and is thus interpretative (Smith, 2007; Smith et al., 2009). Phenomenology and hermeneutics are, accordingly, combined in a single approach, which is the interpretative phenomenological analysis (Smith et al., 2009; Smith & Osborn, 2008). IPA can therefore be placed at the interpretative end of the descriptive-interpretative continuum (Finlay, 2009).

One part of this interpretation is done by means of double hermeneutics. That is, individuals are sense-making persons, and the researcher attempts to make sense of another person's sense of the experience in which they embed (Smith & Osborn, 2008; Smith et al., 2009). IPA also combines an emphatic and suspicion interpretation (Larkin, Watts & Clifton, 2006; Smith, 2004). In other words, data can be interpreted within their own frame, but also by theoretical frameworks from without. Finally, IPA has an ideographic focus and is therefore concerned with the particular rather than the population level (Smith & Osborn, 2008; Smith et al., 2009).

## 2.1 Participants

In line with guidelines offered by IPA (Smith & Osborn, 2008; Smith et al., 2009), a small but relatively homogeneous group of alpine skiers were purposefully sampled. The selection was mainly made on the basis of accessible reasons. Also, to prevent

potential gender difference regarding stress and coping, only females were approached. Moreover, I was looking for high-level racers for several reasons. First, I assumed that this group of skiers would have experiences of one or several stressful competitions. Second, that they would also remember a stressful competition where they coped well, or, alternatively, where they did not cope. Finally, I presumed they were willing to share these experiences.

Participants were eight Scandinavian female alpine skiers with an age ranging between 16 and 22 years (M age = 18.6, SD = 1.99 years). Overall, the level of expertise was high. In the FIS world ranking system, all participants were ranked in the top 150 (with the majority ranked in the top 100) in one or several disciplines. Participants had also represented their nation in one or several important international competitions. One participant was interviewed but her data were removed from this study because she did not manage to bring up any story for talking.

#### 2.2 Procedure

#### 2.2.1 Contact

Before start-up this project received ethical approval from the Norwegian Social Science Data Services (NSD). Following approval, the coaches of a ski team in my own contact network were contacted both in writing and orally. They were given a brief description of the project's aim and nature and asked to take part in it. The coaches were positive about participation and provided preliminary access to the team. Following this, three ski racers of the team were contacted in writing and three were contacted orally. All six skiers were handed a letter detailing the nature of this study and a consent form (see Appendix A). Of these athletes, five voluntarily agreed to take part in this study.

Although five is an appropriate number of participants in a typical IPA study (Smith & Osborn, 2008; Smith et al., 2009), I felt the research question not had been elucidated sufficiently. To obtain more participants, the head coach made contact with another ski team's head coach. The study aims and nature were communicated through the head coach, and, again, the other team head coach was positive, giving me access to this team. I made personal contact with this coach on the first day of a ski camp which the two teams attended. Again, a second account of this study's aim and nature was given. This was done to ensure coaches had understood properly and to clarify any

misunderstandings in the first contact between the two head coaches. Moreover, the coaches were told that I was only interested in three more participants. Owing to several factors (e.g. lodging distances), we agreed that the coach should present the study to potential ski racers at a team meeting in my absence. The coach was given several copies of the information letter and consent form that were handed out to the skiers at the meeting. The skiers were told that it was voluntary to participate, and that non-participation would not have any adverse effect. The ski racers were also told that if they wanted to take part in this study, the athletes should contact me personally on the hill the next day or at lunch. Three participants joined.

#### 2.3 Data collection

#### 2.3.1 The research setting for the interviews

All participants were involved in a confidential interview conducted by me that lasted between 45 and 75 minutes, with most interviews lasting around 50 minutes, which is normal for interviews in IPA (Smith & Osborn, 2008). The interviews were conducted at two separate ski camps in November 2011 at the invitation of the respective teams. Owing to my background as a ski racer and coach, at these two ski camps I offered my help on the hill. Thus, I got a role as "assistant coach" by filming, setting and fixing courses. When we returned from skiing, however, I was free to do the interviews necessary for my thesis. Because ski camps can sometimes be hectic (i.e. long days skiing, dry land, fixing skis), I told all the skiers that my project was the last priority of the day, and only when they were free and had time to spare would we do the interviews. Moreover, I made a private arrangement with each skier regarding which day and time of the day that was most appropriate for the interview. This was done to make things less stressful and more convenient for the skiers. One interview took place before the ski camps, and was conducted in the skier's home town. In line with IPA (Smith & Osborn, 2008; Smith et al., 2009), all interviews were conducted in small closed rooms, where only the participant and I were present. Moreover, the room was quiet, and we could sit comfortably without any interruptions during the interview.

#### 2.3.2 The interview schedule and how the interviews were conducted

Like most IPA studies (Smith et al., 2009), data were collected by means of a semi-structured interview. Conducting interviews in this way "facilitates rapport/empathy, allows a greater flexibility of coverage and allows the interview to go into novel areas, and it tends to produce richer data" (Smith & Osborn, 2008, p. 59). This thesis adopted the same interview schedule as Nicholls and colleagues (2005) used to interview young elite golfers, but with two minor modifications (see Appendix B). First, it was modified and adapted to alpine ski racing. Second, I amended the stress definition.

Initially, in line with IPA recommendations (Smith et al., 2009), I told participants that I was only interested in their experiences and feelings related to competitive stress and the reasons why they handled it well or, alternatively, why they did not. Further, I wanted them to tell me as much as possible about these experiences. The interview then opened with a general rapport-building conversation where participants were asked to talk about their sport career: how had they become involved in sport? which discipline did they prefer? what was their best sport experience and why? The aim of this conversation round was primarily to build trust and get participants accustomed to talking, in line with IPA (Smith & Osborn, 2008; Smith et al., 2009).

Following this conversation, the interviews centred on areas regarding the research question. IPA recommends that the most general questions are asked first (Smith & Osborn, 2008; Smith et al., 2009). Similarly to Nicholls and colleagues (2005) two guiding questions served as a springboard. First, "Please tell me about a competitive situation when you experienced a lot of stress, but handled it well. By stress I mean any situation where you felt that the demand was more than you were able to handle". The elite junior golf players in Nicholls and colleagues (2005) study were told that "stress refers to things that cause you negative worry or concern" (p. 116). This definition of stress treats it an emotion, which several other researchers argue it is not (e.g. Levine & Ursin, 1991; Ursin & Eriksen, 2004). I therefore replaced it with a definition based on McGrath (1970), where stress is understood as an imbalance between environmental demands and response. In accordance with IPA (Smith et al., 2009) and how Nicholls and colleagues (2005) structured their interview, I chose to ask about the situation ski racers handled well first because I thought this would help the participants to be more comfortable and help me to build more rapport. Subsequently, I asked the second

springboard question: "Please tell me about a competitive situation when you experienced a lot of stress, but did not handle it well".

On the basis of these two springboard questions I wanted participants to tell me as much as they could about the situations they described. In accordance with IPA recommendations (Smith & Osborn, 2008; Smith et al., 2009), I attempted to listen actively to participants and let them steer the direction of the interview. Further, by not controlling the direction of the interview, I invited participants into areas that they thought were important for the way they handled the racing stress. In other words, I tried to let them speak freely about the issues of interest, but I tried to keep the interview within the scope of the research question. Moreover, I tried as far as possible to let participants finish what they were talking about. When the rhythm and flow began to tail off, or the participants provided insufficient responses, I made use of open probing questions (Smith & Osborn, 2008; Smith et al., 2009). I asked participants to tell me more about a topic: "Can you tell more about this and that? Why did you handle the situation well? Why did you not handle this situation well?" (see Appendix B).

#### 2.3.3 Recording and transcription

In line with IPA guidelines (Smith et al., 2009), all interviews were audio-recorded and subsequently transcribed for further analysis. Owing to differences in the Scandinavian language used, two transcription methods were used. In those cases when participants spoke the same language as me the whole interview was transcribed verbatim. Alternatively, when interviews were in another Scandinavian language, only significant parts regarding the research question were transcribed verbatim. Although Scandinavian languages have much in common and can clearly be understood orally across the borders, it is more challenging to write in a different Scandinavian language from one's own. Thus, to cut down the time used for transcription, only interesting parts with an eye to the research question were transcribed verbatim. This strategy might have the drawback that it only transcribes areas that accorded with my practical and theoretical knowledge. To avoid this pitfall as far as possible, I used a notebook technique similar to that advocated by Smith et al. (2009). The interview was played through several times before any transcription was made. Each time an interesting theme appeared, I noted the time of the interview. The first time the tape was played, I also recorded the most powerful recollection that fitted strongly with any theoretical position. These

records enabled me to set conceptions aside ("bracket") and look at the interview again from a fresh perspective (Smith et al., 2009). After that, I turned out of the hermeneutic circle, and I started transcribing all of my notes, including the initial recordings that were first set aside. All interviews were transcribed verbatim into Norwegian.

## 2.4 Data analysis

The data were analysed according to IPA guidelines and involved the following steps: (1) reading and re-reading, (2) initial noting, (3) developing emergent themes, (4) searching for connections across emergent themes, (5) moving to the next case, and (6) looking for patterns across cases (Smith et al., 2009). Once all interviews were transcribed, I read each manuscript numerous times to acquire an overall impression of its form and structure. Following several readings, a right-hand margin was added to manuscripts, and was used to annotate relevant and significance incidents with regard to stress and coping. In line with IPA, these comments focused on content (descriptive comments), tone (linguistic comments), and interpretative questioning (conceptual comments). Moreover, I always attempted to stay in dialogue with the manuscript and moved back and forth in the quest for contradictions and similarities in what the person said (Smith & Osborn, 2008; Smith et al., 2009).

The result of the above-mentioned step was a long list of comments, and the next step involved turning these into concise and pithy statements capturing the psychological essence of the text. Constructed themes were always compared with original transcripts to assure the meaning was captured. This step led to a wealth of themes, and provided the basis for the next step, which was to look for patterns and similarities across them. Themes were clustered on the basis of similarities and significance. Irrelevant or non-significant themes were also removed during this process. Those which were left were clustered into higher-order themes on the basis of similarities and relatedness, when this was possible (Smith & Osborn, 2008; Smith et al., 2009).

This procedure was repeated for all the interviews until every manuscript had been analysed in this manner. The final step involved looking for patterns across these high-order themes. High-order themes or themes in one case were compared with other cases. Related or similar themes formed superordinate themes with corresponding subordinate themes. As this process progressed, I sensed that the data also had a sequential face, so I

decided to give the results a temporal look by making a time split ("contextualisation"): before the race and on the race day. Indeed, organising themes in more than one way can push the analysis to a higher level (Smith et al., 2009). The clustering work continued over several months, and the final result is presented in Table 1 and Table 2 in the result section.

## 2.5 The quality of the study

#### 2.5.1 Member checking

This study adopted a member checking protocol similar to Nicholls and colleagues (2005). This involved three steps. First, participants received a copy of their results in a two to five page written paper. This contained emergent themes and a brief description of them, in participants' own words. Secondly, participants were contacted three days later by telephone and asked to verify and/or clarify the results if that was necessary. The conversation usually lasted between 10 and 20 minutes, dependent on how much clarification was needed (the participants generally agreed on the them), and how much they wanted to discuss their results. By means of this member checking protocol, the participants were given the opportunity to comment and judge my interpretation. The participant feedback was mostly was positive, indicating that my analysis were good and that I had captured the meaning of their experiences.

#### 2.5.2 Credibility

The quality of this thesis was also enhanced by my personal credibility in the field. Because the researcher is the tool in any qualitative project, the quality also depends on the knowledge and perspectives the researcher brings into the field and the questions that are being studied (Patton, 1990). The importance of this credibility has lately received attention in sport psychology research. Sparkes (2011) claimed that qualitative researchers' sport knowledge is crucial for building a positive atmosphere where athletes become comfortable talking about issues regarding their sport. Lack of sport knowledge, on the other hand, may produce lower-quality responses because the athletes are unable to share their experiences in the same way as they did with a knowledgeable researcher. Thus, it is of importance to reflect on my knowledge about alpine ski racing to map out why I have high credibility in the field. A brief autobiographical sketch will answer.

My knowledge of skiing is built on three cornerstones. The most important is perhaps my own racing career in alpine skiing. Overall I have 14 years of experience as a alpine ski racer. During these years I have attended a countless number of national races, and a few international races. An important component of this cornerstone is that I left home to go to ski gymnasium at the age of 15, and went there for four years. This allowed me to learn what it is like to be an alpine ski racer in the quest for ever-better results. Moreover, by means of this involvement I have also become familiar with the rules and the language within this subculture, and I am better able to communicate and understand the feeling of skiing.

After I retired as an active skier, I attended the Norwegian School of Sport Science's (NIH) coaching programme. During these years, my knowledge of skiing gained another dimension. This education (bachelor and now master) taught me alpine ski racing from a scientific perspective. Thanks to this education, I am in a better position to understand what is required for a skier to reach the highest racing level. Moreover, whereas my ski technique knowledge was implicit and tacit when I was racing, my training as a coach means I am now better able to express this explicitly in scientific formulas.

The last cornerstone relates to my coaching experience. I began my coaching career as soon as I stopped skiing races and attended NIH's coaching programme. Overall I have accumulated six years of coaching experience, including three years at club level, two years in a ski gymnasium, and one year as an assistant coach for the Norwegian Europa cup team for men. This type of experience has made me better able to see the performer from the "outside" in the pursuit of elite performance, how to get there, and how to facilitate and guide training in this direction. In sum, I have an extensive knowledge base that has enhanced my credibility.

#### 2.6 Ethical considerations

Before start-up, this project received ethical approval from the Norwegian Social Science Data Services (NSD). Qualitative research requires constant ethical reflection during the data collection and analysis, and it is of importance to preserve the human rights of avoiding harm, informed consent, and anonymity/confidentiality during the whole research process (Smith et al., 2009). First, all participants were handed a one-

page paper with an informed consent form and a description of this project's aim and nature (see Appendix A). Briefly, this paper explained that the aim of this study was to uncover how well racers handled competitive stress or why they did not. This paper also informed participants about the topics that interviews would cover. Some participants wanted to see my interview schedule for themselves. In line with Smith and colleagues' (2009) recommendation about giving them the opportunity to do so, I offered them a copy before they decided to join. Moreover, it stated that it was completely voluntary to participate in this study, that the interviews would be confidential and that I would guarantee their anonymity. Finally, it stated that it was possible to withdraw at any time during the whole project without penalty.

In order to protect participants' identity, each was given a pseudonym. Also, the alpine skiing milieu is very circumscribed, and to prevent these participants being identifiable some extracts were modified. Such changes were made for race location and the exact results achieved in the race. When participants referred to championships, be they national or international, the type of championship was only given the name [championship]. Furthermore, I also left out some quotes to ensure the skiers were not recognisable.

Although this project is not a sensitive project according to NSD, asking about negative stress experiences could bring up a negative racing memory, which might be a sensitive issue for the person. Owing to my awareness of this potentiality, and to avoid all potentially negative carryover effect, all the interviews were conducted in the pre-race season. Although I envisaged that talking about a negative stress experience might involve some sensitivity, most participants said they were left with a positive experience of the interview. Some participants claimed the interview was a positive learning experience and that they were now better prepared to meet the upcoming season. This was because after the interview they were better able to see the areas that they had to focus on in order to be successful in future races and eliminate those that were negative. In a subsequent email, one of the athletes wrote: "Thank you for letting me be part of this project. It was really cool!".

## 3. Results and discussion

These are the results from the interviews with the high-level alpine ski racers about stressful races in which they coped and did not cope. In line with the research question and interview schedule, the results relate to the two stressful scenarios: one competition they coped with and one they did not. Implicitly, the two springboard questions in in the interview schedule encouraged the skiers to restrict their story within the race day. The skiers, however, portrayed a more extensive picture than first envisaged. In addition to several themes in the race day, the skiers highlighted a number of positive and negative incidents in the build-up to the race that influenced their ability to cope. Consequently, the results were given a temporal appearance: before the race and the race day.

A quote from one participant is offered as a support of my analysis. When I asked her to talk more about how she handled a particular stressor in the race, she replied that the strategies and mental techniques were of less importance. The thing that really mattered for her ability to cope was the self-confidence and how she managed to build this up before the race. Victoria stated:

... It is neither the one nor the other that works. It is not the breathing exercises that work or the ignorance of the coach, but it depends a lot on your mindset. How you manage to build up yourself before a competition, and the self-confidence, and everything that comes prior to the competition.

The quote points out another important remark. Even tough Victoria made use of various mental techniques and strategies in the races in which she talked about, it was not the strategies that mattered to the ability to cope with competitive stress. The strategies this athlete enumerated in the quote could be understood as types of emotion-focused coping strategies, if accounted by Lazarus and Folkman (1984). Thus attempts to regulate the emotional response of the stress. The strategies were, however, irrelevant. The thing that really mattered was the self-confidence and how she managed to build this up before the race, which is more in line with the postulates of the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). Although this is only a single utterance of one participant, the rest of the skiers' accounts seem to be in accordance with it. A lot of the results in this study are consequently discussed in terms of the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). However, the results were

comprehensive and in order to explain all my findings I have drawn on a number of others relevant theories, which is line with IPA's guidelines (Larkin et al., 2006; Smith, 2004).

## 3.1 The stressful competition in which skiers coped with

This section shows the results from the stressful competition the participants coped with. All participants recalled such an episode; accordingly, seven stories emerged in which the skiers coped with stress. I unveiled seven superordinate themes from this stressful episode, three before the race and four on the race day. The three before the race include: "self-confidence boost", "feeling secure in one's team", and "meeting expectations". The four on the race day include: "being super-confident", "having confidence in one's team", "imagined reduced expectancy", and "social support from the coach". These can be seen in Table 1.

There are numerous reasons why the skiers in this study were able to cope with the racing stress. No stories are identical, but there seem to be some common features that may be useful as an illustration before the reader reads each single theme in isolation. To help the reader understand how the themes are related, I offer here a brief account of my analysis and interpretation. First, the majority of skiers benefited from increasing their confidence ahead of the race ("self-confidence boost"). This enhancement was because the racer had skied well in a pre-race training and/or races. In addition, one skier also praised her coach for having furnished a strong belief in herself ("feeling secure in one's team"). Moreover, some of the skiers also performed well in the first races of a championship or a race round ("meeting expectations"), which reduced the stress level in the race they coped with. Consequently there were many positive incidents that happened in the build-up to the race and that fed into the skier's ability to cope.

By virtue of having enhanced their confidence before the race, many of the skiers stated that they were super-confident in the race ("being super-confident"). On the race day, two of the skiers said they were able to cope by being utterly confident that the result would be good ("a high belief in success"). Another racer said she had a high perception of control that empowered her to cope ("a high perception of control"). Moreover, two said they were able to cope by focusing on performance tasks in the race ("focus on task"). One of these skiers she said that for the first time in her life she had managed to focus on the task in the race and was not distracted by her opponents. On the other hand, for one skier, it was not downplaying the significance of beating opponents that mattered, but the fact that relative competence was sufficient to beat them ("high

relative competence"). Also, one skier said she was no longer stressed in races because she had learned that her performance fluctuated and it did not matter if this single race ended badly ("an unwavering trust in one's ability"). In addition to these various forms of confidence states, a range of positive team variables fed into the skier's ability to cope, such as social support from the coach and having confidence in one's team. Each of these themes is discussed in this section.

Table 1.

Master table of superordinate themes from the stressful competition in which skiers coped with

Before the race	The race day	
Self-confidence boost	Being super-confident	
Successful training sessions	A strong belief in success	
Successful races	A high perception of control	
Feeling secure in one's team	Focus on task	
Feeling confident in the team	High relative competence	
Belonging to a high-ability team	An unwavering trust in one's ability	
Meeting expectations	Having confidence in one's team	
	Imagined reduced expectancy	
	Social support from the coach	

Non-indented themes constitute super-ordinate themes. Indented themes constitute sub-ordinate themes.

#### 3.2 Before the race

#### **Self-confidence boost**

This superordinate theme clusters a confidence boost in the form of "successful training sessions" and "successful races". In whatever way, both enhanced confidence for the upcoming race. Several participants said that this "boost" basically meant everything for their success at the race, because it equipped them with trusting skills (see Section 3.3, "being super-confident"). Hence, a "self-confidence boost" can best be described as a beneficial incident preceding the race that fed into the skier's belief of being able to cope.

Three skiers stated that their high self-confidence was built up by successful pre-race training. Mary, for instance, managed to beat her arch-rivals in pre-race training that "boosted" her self-confidence. Another example emerged in the interview with Victoria. She took one week off from skiing to recover from a medical issue. When she returned to the snow, she was unsure if she would be able to perform well in the upcoming race. This doubt, however, disappeared after a training session where she skied really well and re-established her strong conviction of success. Victoria explained in the interview:

Victoria: Basically, I think the main thing was my preparations a few days before the race, which really gave me the confirmation I needed, because I had [a medical issue] and did not know if I was able to ski the race. I also think that was the reason why I was so damn self-confident. So, one part of me thought that this was going shit—that I was not able to ski the race. While the other part said: "God damn, this is going so well!" because at that training I skied really well. I skied with one of the best men's skiers in the world, only us two in a slalom course. Because such incidents are absolutely optimal for me and I still notice I benefit from such training sessions. You get away from the others, and I think that made the difference. I felt damn special and prioritised. A bit like: "HAHA, look at me! My coach has to strap my boots, but I'm still here and I'm skiing really well".

**I**: So this is what matters?

**Victoria**: I think so. I still notice I get benefits from such things. When one gets away, the feeling is special, and your confidence just "pooow" goes up.

Alternatively, this "boost" reflected successful racing performances before this race ("successful races"). Christine said she had achieved success early in a race round that made her more confident about success in the last and upcoming race. Similarly, Sally

had achieved many good results early in a championship, and also in disciplines where she did not expect to be successful. Consequently, when the "best chance" discipline remained on the programme, she was sure she would do well in this race too. Sally explained:

This was the last day [the race day]. I had done it well throughout the championship. I had done it okay in super-G and everything, but I knew my biggest chance was in giant slalom. But I did not feel good about my slalom skills, and that I still managed to achieve a [good result] in that discipline made me more self-assured: I can do it!

Clearly, both quotes exemplify the significance of success before the race in order to build up confidence on the race day. Overall, this is line with Kingston, Lane, and Thomas's (2010) finding that the closer an important competition is, the more elite athletes rely on demonstration of ability and preparations as their sources of confidence. Arguably, these skiers' confidence boost might have fed into their self-efficacy (Bandura, 1977, 1997) as well as their PROE (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). By virtue of successful pre-race training and races, the skiers might have come to increase their efficacy beliefs through past accomplishment, which Bandura (1977, 1997) claimed to be the strongest source of one's self-efficacy beliefs. "Successes raise mastery expectations; repeated failures lower them" (Bandura, 1977, p. 195). On the other hand, PROE is also a result of having acquired an expectancy that responses will be successful in dealing with a stressor. Accordingly, being successful before the race might also have nurtured PROE. This applies especially to those skiers who experienced success in the race(s). Succeeding in disciplines not supposed be their "best chance" discipline, and with the same racers at the start, convinced the skiers that they would cope in the last race, thereby enhancing their PROE (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

In sport, self-efficacy is often understood as an agent-mean concept (Biddle, 1999), whereas PROE is understood as an agent-end (Pensgaard & Duda, 2002). As Biddle (1999) suggests, however, "while classical self-efficacy work involves agent-means, it is not unreasonable—and has been implicated in a great deal of work on self-efficacy—that efficacy beliefs can also be agent-ends" (p. 18). Consequently, the positive training and races might have had an influence on both concepts.

## Feeling secure in one's team

Coaches and one's team were also thought to play key roles in one skier's ability to cope on the race day, and "feeling secure with one's team" embraces two related qualities. These encompass "feeling confident in the team" and "belonging to a high ability team", and both were important for building trust in her skills. First, the team, and especially her coaches, were key persons who helped her build up her confidence before the race. Specifically, feeling secure in her team, and knowing that the team members had faith in her helped her to attain the confidence level she needed to perform well. Just knowing that the coaches had faith in her was used as an indicator of her own standing—she was on the right track. Mary said this was a key mechanism that made her cope on race day.

I really don't think I needed to worry, because I knew how everything was going on. I was secure in the group. I knew where I had my coaches and teammates. I knew that the coaches believed in me. This means a lot. When one feels secure, then one trusts that one is skiing well, and one doesn't need to stress, because one can ski on a level that one can control. So it's largely about feeling secure in the group, then everything goes much easier ... I think that's the key to everything ... It's much about being confident and believe in oneself. But, it's hard to build up yourself, so it's good if those around have faith in you, then it becomes much easier.

This quote highlights the positive impact of team members, especially the coaches, in terms of building trust in one's skills. Theoretically, this confidence building can act through another source of self-efficacy. Bandura (1977, 1997) argued that provision of verbal persuasion could also feed into one's efficacy beliefs, but to a lesser extent than past accomplishment. The impact of this source is contingent on numerous factors, but the credibility and expertise of the persuader are among the most important ones (Bandura, 1997). Owing to the supervisory role of the coach, this person is often seen as a credible person on whom athletes rely in evaluating their standing (Feltz et al., 2008). This seems in concert with the account of this skier. As she knew that the coaches believed in her, she used this as an indicator that she skied well. Consequently, she did not need to do anything extraordinary on race day, and managed to ski the way she used to in training, and trusted that that was sufficient.

Second, Mary also said that she benefited from training with skilled teammates in the pre-race season. When skiers build up for a race or racing season they usually train

alone with the team, away from their opponents. This might lead to uncertainty over one's fitness for the upcoming race or season. Belonging to a skilful ski team decreased this uncertainty. Specifically, this skier built up her confidence by knowing that she had kept up with her teammates in the pre-season training who she also knew were skilled. Consequently, this skier managed to trust her skills in the race. Mary said:

I know that the girls I am training with are good, so as long as I keep up with them at training, I know that I am fast. Then it doesn't feel like you have to overperform when we are skiing on timing or when there is selection for a race. You can trust like you do in training, because you know that it is good enough.

Arguably, the confidence enhancement from having kept up with one's skilled teammates in pre-season training could also explained by feeding into the past accomplishment of one's self-efficacy (Bandura, 1977, 1997), but it does highlight another important point made by Bandura (1997). He suggested that the influence of mastery experiences upon self-efficacy is dependent on a range of factors, including the difficulty of the achievement. The harder it is to succeed, the more the mastery experience may come to nurture the person's efficacy beliefs. Accordingly, by virtue of belonging to a ski team with many skilled skiers, the feedback of keeping up with them on training is a credible indication that one is on the right track.

## **Meeting expectations**

Successful races were, in addition to boosting self-confidence (see "self-confidence boost"), also beneficial for reducing the stress level for the remaining race. Two skiers (Sally and Christine) said they were able to cope because of a favourable incident. The main source of stress for many skiers was the desired goal of medals or to be successful in one or several disciplines in the championship or the race round they were up to. The status and rarity of this type of competition put extra pressure on skiers to bring out the best in themselves when it counted the most, especially for the skiers that were up the championship. But when the skiers managed to achieve their goals at the start of the championship or race round, this reduced their stress levels in the remaining races. For example, Sally was in the lead after the first run, and felt she had a lot of pressure to win the second run. She managed to cope because she knew she had already received one medal in the championship, and it did not matter if she lost this race:

I was in the lead after the first run, so I had a lot of pressure on me before the second run. But I felt that the reason why I handled it well was because I had already got a [medal], so I already had one medal in my back pocket. And then you become more confident in yourself, and it doesn't matter if you lose this one.

The CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) could explain this "back pocket effect" (sic). According to this theory, the stress alarm is turned off when the person's *be* (SV) value is matched by the *is* (AV) value. Hence, the stress alarm was turned off for these skiers when they achieved (AV) their goals of medals (SV).

## 3.3 The race day

## **Being super-confident**

The superordinate theme "being super-confident" includes "a strong belief in success, "a high perception of control", "high relative competence", "focus on task", and "an unwavering trust in one's ability". All share a common structure of having a high confidence in oneself and in a positive outcome. Many of these sub-beliefs were also a product of a "self-confidence boost" and/or "feeling secure within one's team" in the build-up for the race. In such cases, reference is made to the source of confidence.

The first variant was "strong belief in success" and was highlighted by Victoria and Sally. Both had been successful in the weeks leading up to this race, and had an overall high confidence state. This was embellished further when both experienced a "self-confidence boost" in the days before the race. As a result, they were both superconfident they would perform well in the race. The merits of possessing such confidence emerged in two ways: it allowed the skiers to trust their skills, and also had an impact on the levels of stress experienced in the race. One example illustrating this subordinate theme is offered by Victoria. She said:

**Victoria**: I remember I was extremely relaxed and had another state of nervousness than in the other races ... I think this was the main difference. I knew I had skied damn well at training, even though I had not been skiing a lot the last few weeks. So I built myself up this way. I knew I was in shape. I am not going to ski off the course, anyway! I was just going to ski like I always did, but it ended up better than my previous performance.

#### **I:** Can you tell me more about this feeling?

Victoria: It is just something that comes with me. I do not know where it comes from. It is about your self-confidence. Yes, I do not think I even skied two runs in the warm-up course, I just knew I was going to ski well. It was not like I thought, "Goddamn it today will be good!" But it is this feeling you sit with on the inside, that you are unable to describe, and you do not think about it. But you have it inside. You have this confidence embedded, and when it is there, nothing can go wrong. So it is just something that comes as a result that I had done well, and that I had built myself up properly. Three days before, my coach actually had to strap my boots. But anyway, I skied like hell on that training. And then it clicks. And it clicked at the warm-up. But in that period I was never dependent that it clicked at the warm-up either, I could just do free skiing as a warm-up routine,

This quote illustrates all the features pointed out above. It was built up by successful training sessions before the race, and was a consequence of the fact that the skier knew she was in shape. Further, it had a positive impact on her nervousness and the way she coped with the stress in the race. The CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) can shed light on and account for these two skiers' positive confidence and state of nerves in the race. Arguably, this confidence state seems to be a high PROE; most or all responses lead to a good result (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). By skiing well in the build-up for this race, as both these two skiers did, they established an expectancy that no matter what they did in the race the result would be good. Further, the CATS argues that under such circumstances, the stress alarm is turned off. This is a feasible explanation of why both these skiers said they were extremely relaxed and had another type of stress activation in the race, compared with the other races in their career. The CATS labels such stress activation phasic arousal, and is associated with the training effects of stress, similar to those of any training session do with the body (Eriksen & Ursin, 2006).

Additionally, when the interview drew to a close, the same participant as in the quote above returned to this theme. After some back and forth reflection, the participant opined that this super-confidence state was all that mattered in terms of whether she was able to cope or not. A second quote from Victoria is therefore included to show the reader the enormous impact this confidence state had on her ability to cope. In the subsequent quote, this skier tells of her struggle to give a fair account of the stressful race she coped with. A noteworthy part of this struggle was that the race was only stressful in retrospect and not at the time. This was because she was "in the zone", a

phrase she used for the high super-confidence state that empowered her to deal effectively with the various stressors of the race (i.e. the coach, the audience). When she was "in her zone", as she was in this race, she was not aware of the various stress factors in the race. But, when she was not, the same stress factors could have had a hugely detrimental impact on her. One of these sources of stress was her coach. He expected and virtually commanded her to be on top in the race, but she was "in the zone" and thus thought that she could live up to such expectations. Victoria continued:

I suppose it has to do with where I am mentally, and I believe that was the big difference. It is a bit hard to remember as well and I do not know if I should compare it with where I am now or how I was then. Because when I look back on it, I think that it was a damn stressed situation. I had a stressful coach. He behaved like this and that. But I was so deep down in the zone, so I did not know. I think I reflect much more about it now than what I did then. Because I've never had any or I cannot remember I have had some situations that I have handled well, because this depends on where I am. And when I'm in the zone it is in a way not stress factors that I am extremely aware of. But when I reflect back on it "Well well, the [the medical issue]!" Maybe that was a stress factor? Maybe the audience was another? I was always very concerned about them, but I was in the zone. Do you understand? And I have been in the zone most of my life, but not lately.

Clearly, it appears that because she was "in the zone", the various stress sources in the race did not affect her, and she was totally unaware of them in the race. Taking this interpretation one step further, the reason could be that she expected to live up to the demands of the situation. According to the CATS (Eriksen & Ursin, 2006; Ursin &Eriksen, 2004), the stress alarm is an integrated part of the human safety system that only guarantees our attention to things that are out of control. If things are under control, less or no arousal activation is required ("the alarm is in sleep mode"). The brain decides this on the basis of whether the be (SV) value is in accordance with the is (AV) value of the person or not (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). If there are no differences, the brain does not need to alert us or want us to be aware of them. Accordingly, this could explain why this skier said she had never experienced stress in a race she had handled well, and that she was unaware of the stress factors in the race. For example, her coach was a great source of stress because he expected results. She expected to live up to his standards, however, and was consequently less bothered by the coach as a source of stress. Likewise, in support of my interpretation, Pensgaard and Roberts (2000) found that when coaches adopted a performance climate in Olympics, athletes experienced her/him a significant source of stress but it was significantly less for those Olympians who had high confidence in their own abilities.

Another variant was experiencing a "high perception of control", which Julie stated to be a key variable in terms of her success in the race. Julie explained in the interview that she had attended a big championship for the first time in her career but she felt in control throughout the race, and managed to bring out the best in herself when it counted the most. Julie explained in the interview:

**Julie:** This was the first competition day. I was very nervous, because I was not familiar with what was happening. But I had everything under control all the time. So I had no problem. I had control the whole time and I could do my best. I was not affected by it.

**I:** By the stress?

**Julie:** Yes, exactly. For sometimes I am unable to do the warm-up because I'm so nervous, but this time I could do everything really well. I was in control. It felt just like normal, but I was really stressed at the same time. It felt like I was not so distracted by everything else. Everything went so easy.

This statement is consistent with previous findings that have shown that the perception of control is a key variable when athletes enter a big competitive event (Gould, Eklund & Jackson 1993; Pensgaard & Ursin, 1998). A high perception level of control is not the same as PROE, but it is an important prerequisite of it (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). Pensgaard and Ursin (1998) found that athletes who participated in the Winter Olympics at Lillehammer who had the greatest control of their sources of stress were those who were the most satisfied with their performances throughout. This finding may help to explain why Julie benefited from having this belief during the competition.

The third theme that was clustered within this superordinate theme was "focus on task". One example of how this theme was manifested was Ann's performance strategy of "being tough". She was faced with a tough downhill course covered with hard ice, and she expected that her competitors would treat it with extreme caution. Thus, she knew

that if she just succeeded in "being tough" the whole run, she would gain a huge competitive edge over her competitors. Ann said in the interview:

If you manage to focus on the positive aspects about it, you already feel you have a competitive advantage over the others, at least a few. When you know that many of your competitors are going to be timid, you know that if you are tough, it helps so damn much. So I guess I thought a lot about being tough, because then I could actually achieve something here.

Thus, Ann benefited from focusing on a task that she related to success. An even more visible variant of this "task focus" was mentioned by Susan. For the first time in her career, she was successful in downplaying the importance of beating her competitors and "skiing her own race". Previously the strong desire to beat her competitors had been a source of great stress, but this time she ignored the others' performance. Susan explained:

I did not care about what everyone else thought. People have certainly told me that before, but this was when I really got it into my head, that I figured it out, that I really understood it! "Now it doesn't matter!". It doesn't matter if I ski off the course or I finish, as long as I ski my own race. It was mostly those types of thoughts that went through my mind ... The key was that I found myself. That I found: "I am doing my own race, my competitors are doing theirs." In the end we will see who is the fastest, but now it was I and only I.

Through "skiing her own race" she was also able to find peace and was better able to trust her skills in the race. She said that this was the main key to her success in the race. Susan continued:

Just make the best out of the situation. You have trained for it! You always try to improve in training, which makes it possible to do it well in races. So you have to bring your skills into the race day and you trust them! If you can do it in training, you can also do it in the race ... And trust that you can do it. I can do it! I have it stored in the spinal cord. I can do it! Yes, that was mostly how I acted.

Thus, it appears from the quotes above that these two skiers were able to cope because they managed to focus on performance tasks in the race, not being distracted by their opponents. Explained from an achievement goal perspective (AGT; Nicholls, 1984, 1989), the skiers managed to cope because they were task-involved in the race. According to AGT, the aim of athletes' sport participation is to demonstrate competence, whether to themselves or to others. Nicholls labelled the two goals of

involvement task and ego-involvement, respectively. The key point in AGT is that these two goal involvements hold different criteria of success and failure. Task involved athletes are not concerned about demonstrating relative competence, but are involved in the activity by mastery reasons, such as improving skills, do one's best, and perform as well as possible regardless of the outcome (Nicholls, 1984, 1989). This motivational goal was especially reflected by Susan, who said the only thing that mattered in the race was if she managed to "ski my own race, and not be concerned about my opponents".

The reason why these skiers believed that this was the key to coping in the race seems to reflect an argument that first appeared almost 30 years ago. Roberts (1986) claimed that by virtue of focusing on mastery rather than social comparison task-involved athletes do not experience stress as a matter of an opponent's superior skills or achievements (Roberts, 1986). In other words, they are less likely to experience competitive stress: athletes experience less competitive stress when they are task-involved because relative competence does not matter for the person and is thus not brought into the persons "motivational system" forming *be* (SV) and *is* (AV) values (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). Although they studied anxiety, not competitive stress, Ommundsen and Pedersen (1999) offered some support for Roberts's (1986) argument. They showed that young athletes who participate in sport for reasons of mastery were less prone to experience cognitive anxiety in sport. Together, these explanations account for why the skiers in the present study benefited from being task-involved in the race.

In contrast, it was not downplaying the significance of beating opponents that mattered, but the fact that relative competence was sufficient to beat them ("high relative competence"). This is in sharp contrast to the stressful race where this athlete failed to cope (see Section 3.6, "Trying too hard"). Mary enrolled in the race with only one goal: to beat her arch-rivals. In a pre-race training she had a fine opportunity to test her slalom skills against them. She utilised this opportunity well, and won the training race. This feedback, that she was capable of beating her arch-rivals, boosted her self-confidence, and she felt she gained momentum at their expense:

But I knew more about the other girls. I know, that they know, that they are slower, given that they were that at the training. As a result, I got the upper

hand, or it felt like I had the upper hand. We do not psych each other out at the start, but you know yourself that you have been skiing fast, so you become more confident, and you are able to ski the way you really want.

This positive feedback was of great importance, because it contributed and fed into the trust in her slalom skills. Another advantage that surfaced was that this belief was valuable in reducing the racing stress. She continued:

Once again it became a bit "I-versus-them", because it was a race, and I wanted to be fast. But there was not as much stress as the previous season. However, when it comes to competition, it is of course always stressful. But this time I handled it much better, because I knew them, and I knew I was faster. I knew I was faster the day before, on the same slope and everything. So I had a lot more self-confidence, so I did not need to over-perform. I could ski exactly the same way as I did in training, and it went well.

Clearly, the great virtue that enabled this skier to cope was this that she had high relative competence, built up by beating her arch-rivals in pre-race training. Why the relative competence meant everything to this skier is reflected in her motivational goal. By being motivated to beat arch-rivals, this skier can be classified as being highly ego-involved (Nicholls, 1984, 1989). Athletes adopting such goals in sport, in comparison with task-involved athletes, are more vulnerable to competitive stress (Duda, 2001; Roberts, 2001). This is because the criterion of success is founded on variables outside the person's control (e.g. an opponent's performance). But the stress level is low as long as the athlete has high relative competence and expects to be able to beat their opponents (Roberts, 1986). In the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), the goal of beating opponents is built into the "motivational system" of the person and forms *be* (SV) and *is* (AV) values. Consequently, when PROE is established in terms of being able to beat the opponents, the two values are in tune, and the person does not experience competitive stress. This explains why this skier experienced low levels of stress and coped with the race.

The final theme refers to "an unwavering trust in one's ability" and was underscored by Ann. This skier explained she was no longer stressed before races, because she had learned to play down the significance of each ski race. She had learned that her performance fluctuated, and that a bad performance in one race did not necessarily mean she had lost it and would suffer a defeat in the upcoming race. As a result, this skier managed to keep her trust in skiing throughout a whole season, and she was not

stressed before any races, because she was ready to attribute a potential failure to external reasons. Ann explained in the interview:

I just know I have it in me, so I don't care in single races, and this I've got better at. You know, earlier, I became really pissed if I skied off the course or I didn't ski well, and I still get disappointed, but it's not in the same way because I know that there are so many more races coming up. It goes up and down. It doesn't necessarily mean anything for the next race if I haven't performed well in another. This is also something that I have experienced.

This unwavering trust could also be understood in terms of a high self-efficacy as well as a high PROE, if accounted by Bandura (1977) and the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), respectively. The skier had learned to tone down the importance of single races, and based her success or failure upon the sum of results achieved in a part of a racing season. Thus, it could be understood that this skier had developed a type of "long-term" PROE. Even if she performed badly in one race, she was assured she would come to perform well in the next. A remarkable note about this finding was that the stress level in the race was reduced because she was ready to attribute a potential failure to external reasons. I have no good explanation of this finding, but the attribution belief (e.g. Biddle, 1999) is conceivably brought into play. Attribution is, however, regarded as a distal and interpretative belief (Skinner, 1995), which distinguishes it from PROE that could be understood as a regulative futureoriented belief. In the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) it is the expectancy of being able to cope that turns the stress alarm off. Thus, the two concepts are quite different. Why this skier told the stress level was reduced because she was ready to attribute failure to external reasons I have no good explanation of.

## Having confidence in one's team

One skier also highlighted "having confidence in one's team" as a significant variable that made her cope. Specifically, Sally claimed that the feeling of being part of a ski team with many strong candidates for the podium helped to decrease the pressure in the championship race. Since a major championship was at stake, and the skiers represented their nations, it was equally important that the team's achievement was good as well as own performance. It was therefore advantageous to be a part of a ski team with many strong candidates who could guarantee success in case she should fail. Sally explained in the interview:

You see and hear a bit like: "yes, she is in the lead of the race, and took the lead by so and so much ahead of the second place!" Fortunately, some of my teammates also skied well, and that made me happy. It always helps if you hear that a teammate has skied well. "Okay, now you can calm down!". I also felt we were many girls at the top. Many of us were doing great, so, somehow, you are not alone. You have several teammates around you, and you feel safer. So this may be one of the reasons why I handled it well.

This quote illustrates the importance of having confidence in one's team for the ability to cope, and supports the well-known saying "alpine skiing is a team sport, except from start to finish". The faith in teammates' performances which this skier described is in accordance with Bandura's (1997) collective efficacy, the self-efficacy construct on a collective level. Specifically, it refers to the collective belief in the team's abilities to accomplish a task, and can impact on team members' cognitions (i.e. goal commitment), affective responses (i.e. anxiety) and behaviours (i.e. performances) (Feltz & Chase, 1998). The significance of high collective efficacy is strongest in sports that require high collaborations among team members to perform a task (Feltz et al., 2008). Alpine skiing is usually regarded as an individual sport where the person's performance is the focus, but this finding suggests that, at least during championships, it is equally important that the team performs well. Thus, this skier took advantage of belonging to team with many strong candidates who could win medals. Moreover, the diary written by an Olympic soccer player indicated that high collective efficacy beliefs among team members might feed both into team members' self-efficacy and PROE (Pensgaard & Duda, 2002). Thus, it may be that this skier also produced high PROE by virtue of belonging to a high-ability ski team.

## **Imagined reduced expectancy**

One skier also told how she managed to build up a favourable and less stressed race setting because of a medical issue. In the weeks before the race, she had not been able to ski. Thus, she was also unsure if she would be skiing in the upcoming race. The medical issue did not disappear, but she enrolled in the race anyway. Skiing the race regardless of the medical issue, however, induced a favourable situation where nobody expected anything of her. Victoria said this was advantageous:

**Victoria**: So I did not know if I was able to ski the [race]. So I think the setting, how I created it myself, that I didn't know if I was able to race. But anyway, I told myself that people did not expect anything, because I had a [medical issue],

and I'm only in the race to try. But once I poled out of the start, the [medical issue] disappeared.

**I**: So the [medical issue] disappeared?

**Victoria**: Yes. So I didn't do warm-up, because I struggled with my [medical issue]. Was nervous as usual, but nothing unpleasant. Just what I needed. So I really think that I just fooled myself to think that other people did not expect anything, because I had [medical issue]. And it worked very well!

Why was this strategy successful? It seems that this skier took advantage of a believable self-reported self-handicapping strategy (Prapavessis, Grove & Eklund, 2004). Self-handicapping has been defined as: "any action or choice of performance setting that enhances the opportunity to externalise (excuse) failure and to internalise (reasonably accept credit) success" (Berglas & Jones, 1978, p. 406). These are strategies that may help the person to attribute potential failures to obstacles and do not impair the person's image outwardly (Jones & Berglas, 1978). Consequently, pain is an obstacle that can interrupt performances, and may be used an excuse in case of failure. Prapavessis et al. (2004) argued that the effectiveness of a self-handicap strategy depends on whether it is believable or not. Pain is absolutely believable, and this could be why it reduced the stress level in the race.

## **Social support from the coach**

The final theme centres on the coach and his/her ability to give social support and remain confident of his/her athletes even in an important and tough competition. Two athletes pointed out that their coaches' social support was an important determinant for their success. For example, Julie said she was very nervous before the competition, but she definitely felt better once she entered the start area and met her coach. The coach was laid-back and gave positive oral persuasion and reinforcement.

**Julie**: I think our service man mattered a lot. He is a very laid-back person. He is calm. He waits if you are coming late at start. I think he was the reason why I felt relaxed and confident, just because he was nearby. That it was not a stressful person that was around. Because I know this person very well, so I felt very confident with his presence. I believe he helped me a lot.

**I**: Thank you. Can you tell me more about his behaviour?

**Julie**: Yes, he said we were in exactly the same situation as everyone else. We were just as competent as our competitors, and we had trained as much as them. "Why do you believe they are better than you?". He just told us how it was.

Similarly, Susan said her coach was an important person in terms of toning down the stress factors for the upcoming run. She had been very fast in the first slalom run and had a really good chance both to lower her FIS points and win medals in the competition. Thus, her nerves began to show for the second run. Her coach came up to her and reminded her about "skiing her own run" and toned down the importance of this run. Through this pep talk, Susan managed to focus on herself and her own run.

There were several stress factors involved, but it was of significance to have a person nearby who was capable of downplaying them and also who knew how I felt. Because my coach has known me my whole life, so he knows exactly how to get my mind on the right track, and I think that was of huge importance...I had a good opportunity to get on the podium in [championship]. Shit! What fun! But again my coach came to me and said: "Just ski the way you normally do! It does not matter if you are skiing out or coming down, you cannot influence that. But if you are coming down, you are definitely going to be successful, because you are skiing really well!" ... and when I went into the start box all these words entered my mind and I was ready!

The belief of the coach as an aid for racers' ability to cope with racing stress is in accordance with recent social support research on sport (see Rees, 2007). Both qualitative (Rees & Hardy, 2000) and quantitative (e.g., Rees & Hardy, 2004; Rees, Hardy & Freeman, 2007) research has shown that athletes take advantage of being part of sport milieus where social support is available and offered. One possible reason for this positive effect is that social support acts as a "buffer" for the unpleasant aspects of stress (the stress buffering hypothesis; Cohen & Willis, 1985). Recent research has examined the effect of social support on two such aspects. Rees and Freeman (2007) found high levels of competitive stress to be associated with low self-confidence, but in comparison with those with low social support, social supportive athletes had higher self-confidence. Second, it has been shown that athletes with less social support are more vulnerable to poorer performances when experiencing high levels of competitive stress (Freeman & Rees, 2008) and are less confident (Rees & Freeman, 2007) in comparison with those who compete with social support. Finally, another, but related, way in which the coach's social support could have benefits is the oral persuasion

source of self-efficacy (Bandura, 1977, 1997), thereby increasing athletes' efficacy beliefs.

## 3.4 The stressful competition in which skiers did not cope

This section discusses the stressful race with which the ski racers did not cope. One participant was unable to recall such an episode; accordingly, only six stories were provided. Moreover, one story is not confined to one particular stressful race, but covers a period in which the skier was unable to cope ("slump"). Hence, her pseudonym appears in several of the subsequent themes, and forms two stories. I unveiled seven superordinate themes from this stressful episode, three before the race and four on the race day. The three before the race comprise: "tumbling into a performance slump", "undesirable coaching behaviours", and "not meeting expectations". The four on the race day comprise: "trying too hard", "giving up", "being strung up", and "lack of teammates' support". These can be seen in Table 2.

It is essential to note that many of these themes are interrelated and must be understood in concert. To help the reader understand which of the themes that are interconnected and form a story, I give a brief account of my interpretation of the themes here. There are three primary stories in which the skiers were prompted not to cope on the race day. The first story has its roots in the build-up before the race. Two skiers "tumbled into a performance slump" that made their trust in skiing disappear. The consequence was that both of these skiers expected to ski poorly in the race, so they "gave up" and skied off the course, thereby forming a "tumble into a performance slump" and "giving up" chain. In addition, one of these skiers also experienced the coaches as a big problem ("undesirable coaching behaviours") that made it even harder for her to cope.

The second story is also preceded by unfavourable incidents before the race. Two skiers attended a championship with the goal of winning medals, no matter what the discipline. The opening did not go in their favour, however. They failed in all race disciplines ("not meeting expectations"). Then, standing at the start in the final race, both felt enormous pressure to give of their best when it counted the most. Only one chance remained to achieve the goal. This caused both to tense up and they did not manage to ski well ("being strung up"). Accordingly, these two themes constitute a "not meeting expectancies" and "being strung up" chain.

The final version, on the other hand, was not affected by unfavourable incidents before the race, but by bad decisions and strategies for dealing with the racing pressure ("trying too hard"). Three variants suggest themselves. First, one skier said her biggest goal of the race was to beat her arch-rivals. After a poor first run where she ended up behind her arch-rivals, she panicked. She thought immediately that her abilities was not sufficient to beat them and compensated by "skiing beyond one's capacity" in the second run. This caused her to ski off the course, thereby not finishing the race. Alternatively, the goal of winning medals in front of her home audience elicited a "pushing too hard" response for one skier, which constitutes the second variant. The last variant is very similar to the second one, and refers to "exaggerated preparations" as the result of a strong desire to perform well in an important race.

Table 2
Master table of superordinate themes from the stressful competition in which skiers did not cope

Before the race	The race day
Tumbling into a performance slump	Trying too hard
Technical/physical slump	Skiing beyond one's capacity
Psychological slump	Pushing too hard
Undesirable coaching behaviours	Exaggerated performances
The coach lost faith in skier	Giving up
Overly controlling coaches	High belief in failure
Not meeting expectations	Giving up
	Being strung up
	Lack of teammates' support

Non-indented themes constitute super-ordinate themes. Indented themes constitute sub-ordinate themes.

#### 3.5 Before the race

## **Tumbling into a performance slump**

For two of the skiers, the reason why they did not cope with the racing stress is that both them fell into a performance slump in the weeks before the race. In this context, a performance slump refers to a sustained period of poor performances, and this superordinate theme clusters two variants: one "physical/technical" and one "psychological". Both resulted in loss of confidence, and as a consequence, the skiers gave up on the race day (see Section 3.6, "giving up"). This theme therefore has strong links with "giving up" on the race day. First, Victoria suffered a reverse in the week before the race. She began with medical issues, and her unsuccessful attempts to get rid of them. She was still able to ski, but increased awareness of the medical issue disrupted her rhythm in skiing, and she began to straddle gates in training. To overcome this undesirable tendency, Victoria tried to change her technique, but that only made matters worse:

This was in the period I was on the way down ... I had begun to straddle a lot in training. Tried everything to get back on track. Changed my ski technique. Suddenly, I couldn't ski on hard ice anymore. So the whole mess before this [race] ...

This quote illustrates the slump which affected Victoria. According to Taylor (1988), slumps can be brought about by technical, physical, technological and psychological incidents. In the light of this framework, it seems that a combination of physical and technical incidents caused Victoria's slump. Another slump variant emerged in the interview with Mary. She talked about two unsuccessful slalom races that triggered this slump. Specifically, she enrolled in two slalom races with only one goal, to beat her arch-rivals, but she failed to accomplish this twice. She had expected to beat them, but after a poor first run in the first race, she was behind them. She assumed this was because she lacked the skills necessary to beat them and she tried to compensate by skiing beyond her ability in the second run, which resulted in her skiing off the course and not finishing. After two such races where the same thing happened, Mary said she lost all confidence.

I skied cowardly in the first run, so I was far behind. "What the hell?". I know I'm faster than them. So I panicked and skied off the course in the second run. This was the first day, and the first race I had not finished in two years. But the next day came, and then it was like, "okay, a new day, new opportunities", but

the same thing happened again. And after that I never really got back. I only needed two races not to finish, and I lost all my confidence right away.

Clearly, the latter quote illustrates one thing: this skier was obsessed about beating her arch-rivals, which she did not manage. One can therefore say that Mary skied with a high ego-involvement (Nicholls, 1984, 1989) in the race. Moreover, it was this motivational goal that triggered her slump, accompanied by loss of confidence. Consequently, this could be understood as a psychological slump (Taylor, 1988). This finding adds support to Taylor's (1988) claim that ego-involved athletes are more susceptible to psychological slumps. This is because these athletes tend to attribute competitions where an opponent beats them to their own lack of skills, which was the case with this skier. Overall, both quotes illustrate that the slump had a negative impact on their self-confidence and their ability to cope on the race day, thereby affecting self-efficacy (Bandura, 1977, 1997) and PROE (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) negatively.

### **Undesirable coaching behaviours**

This superordinate theme is an umbrella of two negative attributes of the coach in the run up to the stressful race. By behaving in an unfortunate manner, the coach was perceived as a major source of stress. First, "the coach lost faith in the skier" was an issue that Victoria brought up in the interview. In parallel with falling into a performance slump in the weeks before the race (see Section 3.5, "tumbling into a performance slump"), Victoria was no longer able to meet the coach's increasing performance demands. The only thing that really mattered to her coach was that she delivered racing results. Once she did not manage to live up with them, the coach broke her morale, first by stressing the competitive goals that this skier not was able to achieve and then losing faith in her when she did not achieve them.

... but then it started to go down from there. I didn't manage to qualify anymore, and was broken by my coach, because they were only accustomed to things going well. So everything went to hell ... and no one seemed bothered to take me seriously. "It was just pure luck those years she did it well".

Clearly, it seems that her coach created a strong performance climate (Ames, 1992), which is a term used when people with a supervisory role, such as a coach, communicate that ego goals (i.e. beating opponents, achieving results) are the only thing

that really matters. Such a climate has been shown to be associated with higher levels of performance anxiety (Abrahamsen, Roberts & Pensgaard, 2008) and distress (Pensgaard & Roberts, 2000) in elite athletes. Pensgaard and Roberts found that coaches were perceived as major source of stress when they adopted a performance climate, especially for those athletes with low perceived ability. On the other hand, athletes with high ability perception were less bothered with the coach as a source of stress. The skier in this study fell into a slump and was consequently no longer able to meet the coach's soaring performance demands, thus experiencing the coach as a real source of stress. Arguably, when the coach sets high result goals, and the skier is not able to meet them, the skier experiences non-contingency (Peterson et al., 1993; Seligman, 1975). No matter what the skier does, it would not lead to the desired result, and s/he becomes helpless. In CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), when people are faced with a challenge or threat but are unable to do anything about it ("helplessness"), the stress alarm is turned on, accompanied by the strain effect of stress. Accordingly, this is a possible explanation why she uttered that her coach "broke her".

The second theme that falls under undesirable coaching behaviour is "overly controlling coaches". The fact that the coach did not take into account the skier's preferred way to prepare for the race resulted in a build-up that was not in accordance with their needs. For example, Christine explained in the interview that she submitted an alternative build-up proposal but that the coach did not accept it:

For some reason, my coach would not. I told him that this was the way I wanted it, but he didn't think that this was a good idea. And I knew that this was not a good choice [the coach's alternative].

Similarly, Victoria also claimed the coach behaved in a controlled manner, but the negative impact was bigger for this skier. This is closely related to the fact that she had begun to ski worse and that the coach therefore had lost faith in her (see "the coach lost faith in the skier"). Consequently, the coach did not care about her preparation preferences before the race. This led to dry land training that was too hard, incorrect ski training, and a build-up that was generally at odds with the skier's preferences. Victoria also explicitly said that she had a need to be self-determined, but that this was totally absent in this race, thus undermining her ability to cope. When I asked her to say more about why she did not cope in this race, she replied:

Again, I think it has to do with the preparations. That everything ahead of the race had been wrong in relation to my needs. Absolutely everything! The training. The people I had around me. So everything in the preparations was just totally wrong. For example, nothing was comparable with [another race preparations], where I controlled everything myself. I had a very special build-up for the race. I felt special. I controlled the dry land myself. Everything was autonomous. And I need this feeling of control—that I'm the one who controls it.

Overall, both these quotes illustrate that coaches' overly controlling behaviour resulted in non-optimal race preparation. Specifically, the last citation shows that the coach's behaviour impaired the skier's ability to cope by undermining her autonomy and control. But why had this skier a need for control? According to self-determination theory (SDT; Ryan & Deci, 2000, 2007), together with the need to be competent and feel relatedness, autonomy is a human need that must be satisfied in order to enhance motivation and its adaptive forms. Briefly, the degree of autonomy satisfaction can be measured on a continuum of perceived locus of causality, ranging from purely intrinsic to selfdetermined forms of extrinsic to non-self-determined forms of extrinsic motivation (Ryan & Deci, 2000, 2007). Since the coach plays an important supervisory role in sport, it has been suggested s/he can either facilitate autonomy satisfaction or, alternatively, inhibit it (Vallerand & Losier, 1999). Coaches who facilitate autonomous athletes are autonomy-supportive (Mageau & Vallerand, 2003), whereas coaches who block athletes' autonomy need are controlling (Bartholomew, Ntoumanis & Thøgersen-Ntoumani, 2009). The quotations above clearly illustrate that these coaches behaved in a controlling manner, thus thwarting the skiers' need to be autonomous. This could account for why one of the skiers said that she needed to have control in terms of her ability to cope.

There is a related but slightly different way in which the need for control and autonomy-support affects the ability to cope. Again, the CATS theory applies (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). In order to turn the stress alarm off it is important that the person feels s/he is able to control the situation at hand. Specifically, control is fundamental in having a high PROE. When a person has control and this control is also attached to success ("PROE"), the stress alarm is turned off. Conversely, the lack of control can lead to helplessness; the person feels that it is not possible to do anything with the result (Eriksen & Ursin, 2004; Ursin & Eriksen, 2004). Eriksen and colleagues (2005) suggested that by virtue of an autonomy-supportive sport milieu the athlete

might experience more control and subsequent PROE. In support of this claim, Pensgaard and Ursin (1998) revealed that those Olympians who had the highest perception of control were those who were the most satisfied with their results. The Olympians were asked to describe the type of stress they experienced and when they encountered it. In addition, they reported how much they felt they could influence the stress of the situation (control), and to what extent they were satisfied with the results throughout. The results revealed that the coach was among the main sources of stress in the days before the competition. Also, those who experienced the coach as a source of stress were those who had less control and were least satisfied with their results (Pensgaard & Ursin, 1998). Thus, the control need of the skier in the present study could also be understood as a prerequisite for having a PROE to turn the alarm off (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), as well a need to enhance motivation for the race, as understood from an SDT perspective (Ryan & Deci, 2000, 2007).

# Not meeting expectations<sup>3</sup>

Two skiers (Sally and Christine) said they were unable to cope because they put too much performance pressure on themselves in the last race in a championship. Both attended the championship with the goal of winning medals, regardless of the discipline. The status and rarity of this type of race added extra pressure to give of their best when it counted the most. Since their rankings were good, both were presumed to have good chances of success. After several unsuccessful attempts to reach the goal, however, only one chance remained, and both said they were extremely nervous and tensed up in this race (see Section 3.6, "being strung up"). Being strung up therefore has its roots in this theme. For example, Sally said how stressed she was by not meeting her expectations:

I really wanted to show what I was capable of, because I knew I was in good shape. And then it became extra stressful, especially when I had spoiled the chance I had in the giant slalom ... I was really stressed because I knew it was in giant slalom I was in best shape. I had expected to achieve a good result in giant slalom, so I could relax a bit more on the slalom race. So that was maybe why I did not manage to relax. I thought "Okay, now I stand at the start in the last race in the [championship]. Now I must perform".

<sup>&</sup>lt;sup>3</sup> It is important to note that this theme has to be read in conjunction with "being strung up"

Theoretically, the feeling of being tense before the last race as a result of failing to reach goals at the beginning of the championship is in accordance with the stress alarm-triggering mechanisms in CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). Going into the championship with a strong desire for and expectation of a medal in one or another discipline can constitute a *be* value (SV) for the person. Repeatedly throwing away chances in the other disciplines can be understood as the *is* value (AV), whereby the *be* value *is* not matched. Thus, on the last race day, there were enormous *be* and *is* differences and the brain turned the stress alarm on by increasing arousal (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

## 3.6 The race day

## Trying too hard

Trying too hard is a superordinate theme that captures three performance strategies that resulted in fiasco in the race. These refer to: "skiing beyond one's capacity", "pushing too hard", and "exaggerated preparations". All were elicited by a strong desire to do well in the race, but resulted only in failure. First, Mary tried too hard by "skiing beyond her capacity". She enrolled in a slalom race with the goal of beating her arch-rivals, and was also certain this was within reach, until she crossed the finish line in the first run. Surprisingly, she had skied worse than her arch-rivals and was behind after the first run. She failed to accept a bad run and immediately attributed this to her lack of ability. Slalom races always consist of two runs, and in the second run Mary tried to compensate for lack of ability by skiing faster than she was capable of. As a consequence, she skied off the course and did not finish the slalom race. Mary said in the interview:

I was really stressed and I tried to ski faster than I was able to. I believed my ability was deficient. I tried to surpass myself, and then I began to ski off the course. After that, my mind was filled up with negative beliefs and I never finished any races. Thus, I did not handle the stressful competition well...I performed a poor run, and I did not accept it. I was convinced that they [the arch-rivals] were much better than me, and I did not manage to perform a normal run in the second run. I tried to ski faster than I was able to, and from that moment, I did not manage to finish any races.

Thus, this statement and its subordinate theme contrast with the slalom race this skier was able to cope with in terms of racing stress (see Section 3.3, "high relative

competence"). The competition goal was unchanged: she would beat her arch-rivals. The only difference was that her relative competence was low, and she tried to compensate by skiing faster than she was capable of. Thus, it seems that this skier once again was ego-involved (Nicholls, 1984, 1989) in the race, but experienced the downside of this motivational involvement. AGT theorists argue that ego-involved athletes are more susceptible to competitive stress when they lack confidence in their own abilities to beat others (e.g. Duda, 2001; Roberts, 2001). Specifically, Roberts (1986) asserted that ego-involved athletes who are beaten in competitions have high levels of post-competitive stress because they failed to demonstrate relative competence. Moreover, pre-competitive stress also may be high for this group of athletes, if the athletes compete with an ego-goal but do not expect this goal to be achieved. These two argument fit well with what happened in the slalom race Mary described. First, she failed to beat her arch-rivals in the first run and experienced a lot of stress as a consequence of this. Second, she attributed the poor first slalom run to her lack of ability, and did not expect to be able to beat her arch-rivals in the second despite this was the goal of the race. Thus, this athlete was stricken by a "double stress effect" before the second run.

One can shed more light on high levels of stress by relating this finding to the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). As already pointed out, the brain "switches" on the stress alarm when the *be* value (SV) does not fit with the *is* value (AV). First, a race goal and high expectations about outperforming arch-rivals may form the be value, but failure to perform is the is value. Thus, the brain causes arousal ("stress"). Moreover, by attributing the poor first run to lack of ability, the skier learned a response expectancy in that she believed her ability was not sufficient to attain the goal in the second run. Consequently, the high PROE was lost once she understood her capability was insufficient, and she had high levels of stress in the second run (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). Consequently, she attempted to succeed with a new response, but that only made matters worse, and she skied off the course.

Alternatively, it was not the lack of ability that elicited the "trying too hard" strategy. Susan described a slalom race on her home hill when her performance suddenly flopped. Finally she had a golden opportunity to show off her skiing talent in front of the home audience. All had come to watch, and she looked forward to the race. She was

full of confidence even though the build-up to the race not had been optimal. She was determined to take it easy, but spotting a competitor skiing well took her by surprise, and she rushed her fences.

It was a bit like this: "Yeah, I'll take it easy". But I saw her skiing and just thought "Goddammit, I'm ready!". But it was in the wrong way. It was not "Goddammit, now I'll show her what I can do". It was just "Goddammit, I'll beat her!".

To make sure a successful outcome was within reach and her rivals were beaten, she "pushed too hard". Susan continued:

...I pushed too hard. I wanted too much. I turned too much, because I wanted to get to the next gate. Instead of just taking it easy and just letting the skis run, I turned too much. And it feels great because you get a good response, like, "Goddammit! Here I come!!". However, I was two seconds behind after the first run. What the heck did I do wrong? Yes, the brain thought correct. I wanted a lot. That was good, because I was able to ski well. Everything was awesome! But after this run it was like "What the heck did I do wrong?". And you look at yourself, and you understand that you have done everything wrong.

What did she do wrong? A possible explanation is the home choke hypothesis (Baumeister & Steinhilber, 1984; Wallace, Baumeister & Vohs, 2005). Although athletes typically take advantage when performing in front of a home audience on home ground (see Carron, Loughhead & Bray, 2005; Jones, Bray & Lavallee, 2007), a wealth of studies also points to the opposite, that they tend to underperform (see Wallace et al., 2005). Which of these effects that is brought into play is dependent on a range of variables, but highly skilled athletes performing in technical sports are essentially more likely to experience the effect in the negative direction. It is hypothesised that athletes become more self-focused because of the pressure to perform well in front of a home audience and that this may result in home choke by unravelling skill automaticity (Wallace et al., 2005). Theoretically, the unravelled skill automaticity can be due to shifting attention to components of the skill (Baumeister, 1984; Beilock & Carr, 2001; Gray, 2004) and/or controlling the skill execution process (Masters, 1992; Masters & Maxwell, 2008). Thus, their movements are no longer fast and coordinated, and the person home-chokes.

This theoretical account fits well with Susan's story. She had a huge ambition to succeed in the race because she had an opportunity to demonstrate ski talent in front of her home audience, but failed to do so because she tried too hard. On the other hand, this is not in accordance with past work that has shown that alpine ski racers generally have better home than away performances (Balmer, Neville & Williams, 2001; Bray & Carron, 1993). One possible explanation for this inconsistency may be that home chokes only attack slalom racers. The two studies listed above found an overall home advantage in alpine ski racing, but did not take into account that the picture might look different if one looked at the various disciplines separately. Wallace et al. (2005) suggested that the more technical the skill is, the more it is vulnerable to home choke. Slalom is generally assumed to be more technical than giant slalom, super-g, and downhill, and should therefore be more susceptible to home choke. This may account for why I found a home choke, but others (Balmer et al., 2001; Bray & Carron, 1993) found a home advantage in alpine skiing.

The final theme of the "trying too hard" family is very similar to the previous two, and treats many of the same mechanisms. Two skiers (Christine and Susan) said they overdid their preparation owing to a high desire to perform well in the race ("exaggerated preparations"). They did everything in their power to guarantee a positive result, and tried to do the preparation routine extra well. Unfortunately, that only made matters worse. It led to "high shoulders" and failure in the race, and both regretted it in retrospect. There were many ways in which exaggerated preparations appeared (e.g. fixing skis until late at night), but the most overt one emerged in the interview with Christine. This skier remembered a warm-up course before the race where she took too many runs. She was not satisfied with the way she skied, and since it was an important race she strove for the perfect run that allowed her to trust in her skiing in the race. She explained:

I remember the warm-up course, and that I took an enormous amount of warm-up runs in it, because I was not satisfied with the way I was skiing ... I wanted to be best prepared for the competition in every possible way. I think I took too many, because I wanted it do it extra well since it was [championship]. And it was the discipline I had been good in. I was ranked well and was in the first group. So I thought: "Now there can be no question that I have not done things right before the race!". So I was all alone. Everyone else sat inside and ate lunch, while I skied the warm-up course.

Thus, it seems that increasing effort and overdoing the race preparations were not beneficial for the skiers. This is quite similar to results obtained by Nicholls and colleagues (2005). In their study, high-level golfers who tried too hard, and departed from their normal game routines, failed to cope with stress. These researchers found that failing to cope with stress generally was associated with increasing effort resulting from a high desire to do well. Similarly, our two skiers seemed thrilled about doing well in the important race, and departed from their normal routine, which is what less successful athletes usually do when they are performing in an important competition (Gould, Flett & Bean, 2009).

## Giving up

Giving up is a superordinate theme strongly induced by undesirable incidents before the race, such as when two skiers fell into a slump (see Section 3.5, "tumbling into a performance slump"). After weeks of futile attempts to pull out of it, the skiers felt irretrievably lost, and experienced a lack of confidence. This led both Victoria and Mary to give up on the race. This theme clusters both the "high belief in failure" and the act of "giving up". For example, Victoria suffered a reverse before this race, which led to a number of concerns. She had begun to straddle gates in training, which was a real concern. To overcome this problem, she tried to change her technique before the race but that only made matters worse, and undermined her ability to ski on hard ice, which was, unfortunately, exactly what she had to do in the race. Thus, a lot of negative incidents led to a high belief of failure. Victoria said:

**Victoria**: I knew I was out of shape. It was hard ice, I was very unsure, and the circumstances were all wrong. I had a hunch that I shouldn't have been there. I really did not feel good about competing.

**I**: Can you tell me more about that feeling?

Victoria: Yes, you know when you have a feeling that this is not the right place to be? This is not going to work. Again, it is this inner feeling. It wasn't my thoughts that said: "Victoria, this is not right, this is certainly not right!" So, it wasn't the thoughts that kept my head buzzy. But instead of being self-confident, I had a horrible inner feeling that dismayed me at the start ... and every single negative thought at the start went straight into me, and I did not manage to block them out. So that's the difference when I'm able to stay in the present and when I'm really not. Because in this race I was certainly not, and I have not been there for a couple of years, and this is really unpleasant,

#### **I**: Unpleasant?

**Victoria**: Yes, really unpleasant! It was really unpleasant to be at the start in a [championship] with everyone watching you ... Knowing: "Shit, this is going to hell!".

From the quote above, it is clear that Victoria expected that she would not perform well in the race. On top of it, her coaches held extremely high and unrealistic expectations, and this was the only thing that mattered to them. Because she had difficulties finding trust in skiing, she knew she was not going to perform on the level they wanted. In addition, this skier lacked autonomy and control in the build-up and during the race. This was partly because her coaches did not invite her to discuss the race preparations (see Section 3.5, "undesirable coaching behaviours"). Overall, however, there was simply too much pressure and she was not able to deal with it. As a final desperate attempt to regain control, she made contact with a mental coach she knew and trusted. She thought that such a session would benefit her self-confidence and allow her to regain control. But it did not work out at all. She was far outside "the zone" where she could benefit. As a result, she decided to put her weight on the inside ski and hip out of the course, thereby not finishing the race. Victoria continued:

**Victoria**: I tried to take back control. For instance, by calling various people who I trusted and who backed me up 100%. This is also a strategy that I avail myself of before races. I talk to people that evoke the best in me ... But this time it didn't pay off ... the problem was that I lacked control ... But I tried to fool myself into believing that I had confidence.

### **I**: But you had none??

**Victoria**: Yes, I didn't have a shred of confidence! So that's the difference ... I didn't do anything special to deal with the situation, because it was far above my head. It was totally distant. I had actually given up before the start. Nothing could be done. I just put my weight on the inside ski and hipped out off the course! "Oops!" an inside ski on the ice! That was exactly what I did. That was my solution. Just removing myself from the situation, so I avoided answering the question: why weren't you in the top 30? So my solution was to remove myself from such questions, from what might happen. But it became chaos anyway. It became a huge disappointment.

The CATS theory (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) can help to shed more light on these tales. According to this theory, a person who lacks PROE and control in the face of a challenge or threat is stricken by helplessness. Consequently, the brain fosters an expectancy that there is no relation between what the individual can do and the outcome. The affective value (A) is unattractive, but the person believes s/he cannot do anything about it (Ursin & Eriksen, 2004). In such cases, the brain elicits the sustained activation mode of the stress alarm that can lead to ill-health and disease in the long run (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

Helplessness can strike when a person experiences an unpleasant life event beyond their control (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). This skier had coaches whom she experienced as controlling. It was an important race, and she felt it was impossible to turn the negative outlook into a positive outcome. Thus, her solution was to give up and ski off the course. This passivity and act of "giving up" is often how one can identify helpless people (Peterson et al., 1993).

On the other hand, the "skiing off the course" strategy seems to be an intentional act to "save face". Arguably, this could be understood as another self-handicapping strategy. Self-handicapping theory (Jones & Berglas, 1978) suggests that people might come to adjust the real aim of an activity (e.g. ski as fast as possible) to an underlying need to protect their public face. In other words, the priority is to protect one's self-image, rather than making the best of the situation. Specifically, by employing a self-handicapping strategy, it is possible to discount the personal reasons for failure and maintain one's public image outwardly (Jones & Berglas, 1978).

In slalom and giant slalom especially, it is more or less accepted that performance fluctuates, and that skiers from time to time do make mistakes and do not finish the race, even the very best of them. Indeed, the FIS 2010 list reveals that about one-third of the women who started WC slalom races did not finish (Seifert, Kipp & Bacharach, 2012). Skiing off the course is something every racer does now and then but it seems that the skiers in this study employed it as a way to protect their public image. Indeed, since the "did not finish" result is undesirable, but beyond the control of the skier, it can be classified as an "effective" self-handicap strategy to "save face" (Prapavessis et al.,

2004). As in the case of the skiers in this study it is easier to explain away a "did not finish" than it is to explain away a bad result.

Likewise, Mary also felt irretrievably lost in the race. She had fallen into a deep slump and had not reached the finish in any of her earlier races. She had begun to straddle gates and began to make mistakes. Of course, this also affected her confidence in the stressful race, and she did not know how to solve the problem. In the previous races, she had tried everything. She tried to ski slowly to ensure she finished the race, but that only meant that she was behind her arch-rivals. Alternatively, she tried to ski to capacity in the second run, which also led to a negative outcome. During this period she struggled to regain her trust in skiing because she constantly compared herself with her arch-rivals, who were always above her on the result list. Therefore she did not manage to ski her own run. She felt compelled to ski slowly in the first run, because she was afraid that her bad habits would emerge in the race. As a result, she was far behind her arch-rivals, so she did not want to finish the second run.

I did not risk anything in the first run. More accurately, I had begun to ski off the course and therefore I was afraid to ski off the course. So I slowed down to ensure I finished, because I did not think that I was able both to ski fast and finish at the same time. I was obliged to ski slowly and finish. As a result, I was far behind those I wanted to beat, so I did not want to finish the second run, because I knew I was behind.

Although more hard to understand, this description is more in line with what the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) regards as hopelessness. It seems like everything the skier did led to a negative result, whether it was skiing slowly or skiing faster than she was really capable of. After an extended period of failures, this athlete might have come to learn that every response led to a bad result, which is the acquired response outcome expectancy the brain fosters in a person who has acquired hopelessness (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). An essential component of this state of response expectancy is that a person has control but cannot do anything right. Everything leads to a bad result (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). Similarly to helplessness, when the individual is hopeless, the brain activates the strain mode of the stress alarm (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

Apparently, this skier made use of the same self-handicap strategy as the previous skier. It was the motivation to beat her arch-rivals, combined with a lack of confidence in her own abilities to accomplish this, which triggered the employment of it, however. The skier did not want to finish because she expected she would be beaten by her arch-rivals. Accordingly, she competed with a strong ego-involvement (Nicholls, 1984, 1989). This finding is in line with previous research that has shown that ego-oriented athletes are more likely to use self-handicapping strategies, especially when they perceive their ability to be low (Ommundsen, 2004; Ryska, Yin & Boyd, 1999).

# Being strung up<sup>4</sup>

In the wake of spoiled chances in the championship opening (see Section 3.5, "not meeting expectations"), Sally and Christine said they were immensely stressed and tensed up for the last race. As a result, they did not manage to ski well. Sally described being strung up in this manner:

I knew I also had a chance in slalom, but then we came to the slalom day, and I have no idea what happened, but my body was entirely tensed up and I didn't manage to ski well. I skied so slowly.

These skiers said they were tensed up and that they were not able to ski well. Although the CATS argues that stress activation is "an optimal, positive and desirable alarm response, where physiological resources are mobilized to initiate and improve performance" (Ursin & Eriksen, 2004, p. 583), high arousal according to "drive theories" can reduce performance and cause choking under pressure (for a review, see Beilock & Gray, 2007; Hill, Hanton, Matthews & Fleming, 2010). The inverted-U hypothesis (e.g. Landers & Arent, 2006), for instance, assumes that performance may benefit from arousal activation up to a certain point, but that performance suffers if that point is passed. Furthermore, the tolerance point differs across sports, with fine motor skills having lower arousal tolerance (Landers & Arent, 2006). Alpine ski racing is a technical sport, and it may be that skiers can only withstand a certain amount of arousal before performance suffers. This could account for why these two skiers were not able

<sup>&</sup>lt;sup>4</sup> It is important to note that this theme has to be read in conjunction with "not meeting expectations"

to cope. Previous work, however, has not found clear evidence of when and if arousal damages performance (e.g. Beilock & Gray, 2007; Hill et al., 2010).

# Lack of teammates' support

The very last theme refers to the lack of social support from teammates, not because they did not provide support, but because they were not present in the race. Two skiers felt it was difficult being alone in a championship and knowing that you alone are responsible for the team's results. Both skiers missed the support of their teammates in the race. This was highlighted as a theme that undermined the skier's ability to cope. This theme can be elucidated from a variety of theoretical perspectives. I build the discussion on three possible explanations. First, it seems that this theme contrasts with "having confidence in one's team" in the race they coped with. Because they had no teammates around them, the skiers could not benefit from high collective efficacy (Bandura, 1997), and the team's results were based solely on their performance. Second, it could have resulted in low group cohesion. Indeed, Carron, Colman, Wheeler, and Stevens (2002) have shown that high group cohesion is associated with better performances, especially among female athletes. Thus, because she had no teammates around her this skier experienced low cohesion. Finally, it has been shown that athletes with less social support are more liable to perform badly (Freeman & Rees, 2008) and are less confident (Rees & Freeman, 2007) than those athletes who perceive high levels of social support.

## 4. General discussion

The overall aim of this thesis was to get insight into why and what happens when high-level alpine ski racers cope with competitive stress and why and what happens when they do not. Moreover, it was to gain insight into the factors which were associated positively and negatively with the ability to cope with competitive stress. The results unveiled a number of themes which in this section are arranged into three families of variables: training/preparations variables, team variables, and personal variables. The results also indicated that many themes were in opposite to each other. In order to better illustrate these contrasting relationships, I created figure 1, which summarizes the overall findings of this study. By virtue of this figure it is possible to show the variables with a positive and negative influence on the ability to cope with competitive stress.

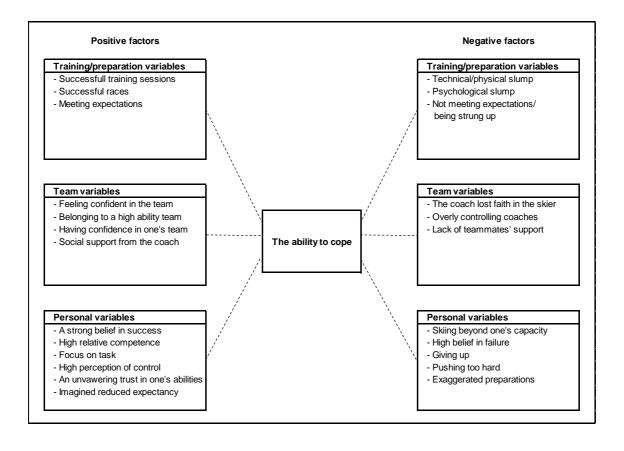


Figure 1. This figure summarizes the overall findings of this study. The boxes at the left side cluster all the themes from the stressful competition in which the alpine ski racers' coped with. The boxes at the right side cluster all the themes from the stressful competition in which they did cope with. It is important to note that these not necessarily are causal variables.

The subsequent section summarizes the results obtained in this study, and discusses it by lifting it up to a higher theoretical level. Practical implications based on my findings are also offered when this occurs naturally. Because IPA (Smith et al., 2009) is a qualitative method which is founded on ideography, and thus is concerned with how a phenomenon is perceived in detail by a specific group of people, it would not be reasonable to claim that my results can be generalized. However, my findings suggest a number of practical implications for coaches and athletes within the frames of the study.

# 4.1 Training/preparation variables

As can be seen in figure 1, a number of training/preparation incidents in the build-up to the race seemed to have influenced the skiers' ability to cope, some positively and others negatively. I will begin by discussing the positive incidents, which can be seen on the left side in the figure.

The results of this study indicate that several skiers benefitted from a number PROE and efficacy-building incidents in the build-up to the race, with which they coped. First, many skiers spoke of "successful training sessions" and/or "successful races" that enhanced the confidence for the race they were up to. Further, this boost convinced the skiers to do well in the race, which is in accordance with high efficacy beliefs in terms of Bandura (1977, 1997) and PROE in terms of the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). These findings support Pensgaard and Duda's (2002) argument that more attention should be paid to the importance of successful training sessions and competitions held prior to important events.

Because the coach plays a key role in sport (e.g., Vallerand & Losier, 1999), a practical implication of my findings is that coaches should aspire to design successful pre-race training in order to increase the efficacy beliefs and PROE of their athletes in the race. In addition, generally, another way the coach might facilitate such boost incidents is to plan which pre-race races in which their athletes are due to enrol. Some races may be more confidence building than others, i.e. due to harder competition, and an important role of the coach therefore becomes to decide which races it is sensible for the skiers to enrol for, with an eye to enhance the confidence of their skiers.

On the other hand, in the race in which they did not cope, two skiers experienced negative incidents that seem to have had a decay effect on PROE and efficacy beliefs. By adhering to Taylor's slump model (1988), I unveiled two different performance slumps. One skier's slump was initiated when she failed to beat her arch-rivals in the race. This was accompanied by her counteracting response of skiing faster than she was capable of, which only made matters worse, and filled the skiers with negative beliefs. Hence, this slump was a "psychological slump" (Taylor, 1988). Another slump was by triggered by technical and physical issues and could thus be seen as a "technical/physical slump" (Taylor, 1988).

Consequently, another practical implication for the coach is to avoid their athletes to tumbling into slumps prior to races. Also, the coach should bring all resources into play to pull their athletes out of slumps, if they already are deep down in one. To this end, Taylor (1988) argues it is essential that it is the source of the problem that is identified and worked with. The two slumps which were variants in this study were rather different, therefore requiring different slump busting approaches.

Finally, in the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), the stress alarm turns off when expectancy is met, and turns on when it is not met. In accordance with this, my findings showed that the way the initial races in a race round or championship turned out for some skiers had an effect on the stress levels in the race some of the skiers talked about. When the race goal expectancy was met ("meeting expectations"), this reduced the stress, whereas the opposite happened when it was not met ("not meeting expectations/being strung up"). The skier who highlighted this theme said that their performance suffered by being too stressed in the race. The arousal-performance relationship has been examined a great deal in sport (for a review, see Beilock & Gray, 2007; Hill et al., 2010).), but no clear connection has been found. More research should therefore examine if and eventually when performance may suffer, and investigate this pattern specifically with regard to alpine ski racing.

#### 4.2 Team variables

A number of qualities of the team were cited as contributing factors to the athletes' ability to cope, some positive and others negative, as can be seen in figure 1. To keep

this discussion section lucid, I will discuss the variables of the coach and teammates separately. I will begin the discussion by examining the coaching variables.

An interesting finding of this study was that many skiers acclaimed their coaches to play an important and positive role in the race in which they coped, but a negative role in the competition where they not coped. First, in the race in which they coped, one skier seems to have managed to build up a high level of self-efficacy and PROE partly as a result of her teammates and especially her coach believing in her ("feeling confident in the team"). This was used as an indicator that she did well and was on the right track.

Related to this positive attribute of the coach, some skiers said that they took advantage of "social support from the coach" in the race in which they coped, and praised their coach to account for why they had coped. Theoretically, this seemed to have boosted their self-efficacy belief, as accounted for by Bandura (1977, 1997), and provided a buffer against the decayed impact that stress can have on performance (Freeman & Rees, 2008) and self-confidence (Rees & Freeman, 2007) in competition.

On the more negative side, my findings also showed that coaches were also associated negatively with the ability to cope, and as a real source of stress, when they behaved in an undesirable manner. The coach as real source of stress has also been found in previous research (Noblet & Gifford, 2002; Pensgaard & Roberts, 2000; Pensgaard & Ursin, 1998; Thelwell, Weston, & Greenlees, 2007). The study identified two such unfavourable examples of the behaviour of the coach: "the coach lost faith in the skier" and "overly controlling coaches".

Firstly, one skier seemed to have suffered the demerits of the performance climate (Ames, 1992) built up by the coach. The coach stressed the achievements of the performance results, which the skier at the current moment was unable to attain. Consequently, this skier seemed to have experienced non-contingency (Peterson et al., 1993; Seligman, 1975), which in the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) is accompanied by the straining effects of stress. It is, however, important to note that the coach also was a real source of stress in the race situation with which she coped, but was to lesser extent problematic in this situation. This was because the skier possessed a strong belief in herself, and thus managed to live up to the coach soaring

performance demands. This result is in accordance with Pensgaard and Roberts (2000) finding that athletes are more likely to see the coach as being a source of stress when they have low perception in their own abilities.

Secondly, I also found that coaches undermined the skiers' autonomy and control, which could be understood in terms of undermining autonomy satisfaction in SDT (Ryan & Deci, 2000, 2007), and the need to subjectively feel that one is able to control the situation at hand, which is fundamental for PROE in the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

Thus, my findings highlight the important role of the coach. A practical implication of these results is that coaches should be encouraged to create a mastery and an autonomy-supportive climate. First, a mastery climate may be beneficially in terms of reducing the racing stress related to performances. Previous research has shown mastery climate to be negatively associated with the coach as a source of stress (Pensgaard & Roberts, 2000). In addition, such a climate might increase athletes' perception of the availability of social support, which some skiers in this study uttered they had taken advantage of in the race in which they coped. This is because it has been hypothesised and to some extent found that a performance climate is negatively associated with the perception of having social support available (Abrahamsen, Roberts, Pensgaard, & Ronglan, 2008).

The second practical implication of this study is that, in order to enhance skiers control perceptions (which is of importance for PROE) a coach should create an autonomy-supportive climate (Eriksen et al., 2005). One way of dealing with this is to follow the autonomy-supportive coaching principles outlined by Mageau and Vallerand (2003).

I also unveiled a number of variables associated with the teammates' influence on the ability to cope. In the race in which they coped, one skier told she took benefit of "having confidence in one's team" to achieve a medal. This corresponds well with Bandura's (1977, 1997) collective efficacy. Eriksen and colleagues (2005) have suggested that collective efficacy may feed into the individual team members' PROE, especially in team sports. Alpine skiing is not a team sport per see, but it seems that high collective efficacy also affects the skiers in a positive manner. Future research is needed to examine the collective effect on alpine skiers.

#### 4.3 Personal variables

This study identified a number of personal variables that were associated with the skiers' ability to cope, some positive whereas others were negative (see figure 1). Generally, the present findings are in accordance with the postulates of the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). This theory claims that PROE turns the stress alarm off. Similarly, my findings showed that many skiers were considerably less stressed in the race with which they coped, as a result of having established an expectancy of being able to cope in some way or another:

Some skiers voiced they had "a strong belief in success" that reduced the stress of the race. As a result of having skied well in training and races in the run up to the race, they were really confident that they would perform well in the race. Interestingly, and in line with the beneficial function of PROE, one skier outlined that the race with which she coped was only stressful in retrospect and not at the time. This was because she was really confident about doing well, which is in line with the positive virtues of PROE (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). One skier also told she had a "high perception of control", which is in an important prerequisite for PROE (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). Pensgaard and Ursin (1998) found that athletes who participated in the Winter Olympics at Lillehammer who had the greatest control of their sources of stress were those who were the most satisfied with their performances throughout. Since this skier talked about high levels of control in the stressful race in which she coped it is conceivable that this control perception also was attached to positive outcome, which is similar to PROE. Moreover, another skier uttered she had developed "an unwavering trust in one's ability", which could be understood as a strong PROE.

My findings also indicate that PROE seems to have acted through the motivational involvement of the skiers. One skier adhered to the racing goal of beating arch-rivals (ego-involvement; Nicholls, 1984, 1989), but PROE seems to be established in terms of that she believed she was able to do it ("high relative competence"). Alternatively, another skier toned down the importance of beating opponents, and managed to "focus on task" (task-involvement, Nicholls, 1984, 1989). This was accompanied by her trusting in her skiing. Arguably, this skier managed to cope as a result if having established PROE in self-referred terms.

On the other hand, the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) argue that the brain turns the stress alarm on, accompanied by the strain effects of stress, when no coping exist. The theory posits two such response outcome expectancies: helplessness and hopelessness. Some skiers' accounts seem to be in accordance with these two expectations.

Again, one skier took part in a race with ego-involvement (Nicholls, 1984, 1989) by adhering to the goal of beating her archrivals in the race. One skier said she was really stressed in a slalom race because she had failed to beat her arch rivals in the first race. Consequently, in the second, she counteracted by skiing faster than she was capable of ("skiing beyond one's capacity"), which made only matters worse and she skied off the course. This fits well with the CATS argument that the stress alarms will turn on when expectations are not met (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). This is in line with Roberts (1986) who claimed that ego-involved athletes experience competitive stress when they are beaten and/or are expected to be beaten.

One skier seemed to have been stricken by hopelessness in the race in which she did not cope ("a high belief in failure"), if accounted by the CATS (Eriksen & Ursin, 2006; Ursin, 2004). In order to beat her arch-rivals, this skier had tried everything from skiing slowly to ensuring that she finished the race, to skiing faster than she was capable of, which resulted in her skiing off the course. Consequently, everything she did led to a negative outcome, which is in line with hopelessness in the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

I also unveiled a skier in a state of helplessness, which refers to when people perceiving non-contingency between responses and outcomes (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). This skier explicitly said she knew the race was going to end badly ("a high belief in failure"), but was unable to anything about it.

Thus, it clearly appears that the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004) is a useful framework to shed light on skiers' experiences of stress. Also, this theoretical framework can account for the psychological mechanisms that enabled the skiers to handle the stressful race in a positive manner, or, alternatively, that did not. To cope with competitive stress in alpine ski racing, it was essential that the skiers had

established PROE in some way or another. My findings underscore the importance of having PROE for ego-involved athletes, because a lack of PROE was identified by maladaptive performance strategies. This also highlights the great virtue of being task-involved in the race.

Partly based on a highly knowledgeable sport psychology consultant professional's philosophy (e.g., Pensgaard, 2012), a practical implication of this finding boils down to encouraging skiers to set mastery goals in races, which might prevent the use of the maladaptive performance strategies. Likewise, by doing so, the skier might also likely to develop PROE in terms of task goals in the races.

I also found that, as a consequence of having a high belief in failure, some skiers chose to self-handicap by skiing off the course ("giving up") instead of crossing the finishing line and obtain a result. Self-handicapping theory (Jones & Berglas, 1978) posits that people might come to adjust the real aim of an activity to an underlying need to protect their public face, in line with these skiers' accounts. Furthermore, one skier in this study chose to self-handicap because she knew she was going to be beaten by her archrivals. This is in accordance with previous research that has shown ego-involved athletes as to be very susceptible to self-handicapping strategies (Ommundsen, 2004; Ryske et al., 1999).

This finding is of great importance to skiers and their coaches. Skiers are surely keen to improve themselves as skiers, but by making use of self-handicapping the athlete might miss out on many potential learning situations. It is of great importance that athletes respond adaptively to such setbacks. Although self-handicapping may be beneficially in the short run, because it serves as a strategy to 'save face', in the long run it may be maladaptive because it prevents the skier from experiencing feedback on mastery. It of importance that skiers accept where they currently there are, and develop gradually from there. Since task-involved athletes are less likely to make use of self-handicapping strategies (Ommundsen, 2004; Ryske et al., 1999), a practical and adaptive approach to prevent skiers self-handicapping when facing set-backs is to set and focusing on mastery goals.

Finally, this study unveiled a home choke story where one skier underperformed when she had pushed too hard. She had a golden opportunity to show off in front of the home audience, but did not manage to do so because she tried too hard ("pushing too hard"). This finding is in accordance with the home choke hypothesis (Baumeister & Steinhilber, 1984; Wallace et al., 2005), but deviates from the picture that previous research has painted. This research found that alpine ski racers generally have better home than away performance (Balmer et al., 2001; Bray & Carron, 1993). One conceivable explanation for this discrepancy is that home chokes only happens to slalom racers because this is a more technical event. Future research is needed to examine whether such a relationship exists.

### 4.4 Theoretical discussion

This study adopted a phenomenological approach to gain insight into why and what happens when high-level alpine ski racers cope and do not cope with competitive stress. This approach made it possible to get the skiers own accounts of why they did and did not cope. The skiers talked surprisingly little about strategies used to tackle competitive stress. Moreover, one participant explicitly uttered that is was not the strategies that mattered to her ability to cope with competitive stress. This seems to underpin Eriksen and colleagues (2005) argument that it is less relevant to discuss which coping strategies that are good or bad in dealing with competitive stress.

This thesis adopted the same interview schedule as Nicholls and colleagues (2005) used to interview young elite golfers. They identified a number of effective coping strategies in which the players used when they tackled competitive stress well, and a number of ineffective coping strategies when they did not tackle it well. Since I adopted the same interview schedule, I envisaged the skiers also would talk about many of the same type of strategies. However, the skiers talked very little about strategies employed to tackle competitive stress. The skiers' accounts seems thus not to support Lazarus and Folkman (1984) and other coping effectiveness approaches in sport psychology (see Nicholls, 2010; Nicholls & Polman, 2007).

On the other hand, as has already been outlined previous in this section, the skiers' talked a lot more about the confidence state in the race, and how this was built up or undermined by various favourable or unfavourable incidents in the race preparations.

Thus, the picture I unveiled in this study seems to support many of the postulates in the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004). On this basis it seems that the CATS offer a good approach of the psychological mechanisms that enable skiers to handle stressful situations in a positive manner or, alternatively, that do not (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004).

# 4.5 Strengths and limitations of this study

There are a number of strengths and weaknesses that must be taken into account in the evaluation of this study. Regarding the positive facets, in line with the recommendation to employ less structured interview guides in qualitative stress and coping research (e.g., Neil, Mellalieu, & Hanton, 2009), a remarkable strength of this study was the open approach to examining the stressful races the ski racers did and did not manage to cope with. By using the IPA's (Smith & Osborn, 2008; Smith et al., 2009) methodological framework and a semi-structured interview, which as far as possible endeavoured to follow the ski racers' story, this study revealed a number of different stories and themes. Thus, I have unveiled a rich spectrum of themes that provides a comprehensive picture of the factors which seemed to reflect positively or negatively on their ability to cope.

This study seems also to have yielded well from my knowledge about and credibility to alpine skiing. Sparkes (2011) recently argued that the credibility of the researcher is of importance for facilitating an interview setting where the participants become comfortable with talking about issues regarding their sport. Being cognizant of that the researcher also is familiar with the sport they are doing makes it easier to explain and to put words to the experience that they possess regarding the subject (Sparkes, 2011). The quotations that are submitted in this study imply that the skier races were quite comfortable talking directly and in an unrepressed way about the stressful races they did and did not manage to cope with.

Notwithstanding the above-mentioned strengths, several potential limitations should be noted. First, a feasible limitation of this study concerns is that the ski racers were able to provide complete accounts of the situations they were revived to talk about. This is an issue which faces every stress and qualitative research that are retrospective (Nicholls & Ntoumanis, 2010). The ski racers were encouraged to talk about stressful races they did and did not manage to cope with. The time between the interview and the concrete story

the skiers brought up for discussion ranged between a few months to several seasons back in time. Hence, it is conceivable that the participants in this study have left out central details about the situations because the situation perhaps not was fresh in mind.

Nevertheless, it is also worth noting that in spite of the attempt to assemble a homogeneous group of alpine ski racers, apparently there was still was a slight skewness of age and racing experience in the sample. The age of the sample ranged between 16 and 22 years, which of course implies that some participants had more racing experience than others. As such, the stories the skiers brought up varied considerably in terms of the level of competition. This is a limitation of this study. Finally, given the qualitative nature of the study, causal claims cannot be drawn based on this study's results.

## 5. Conclusion

The overall aim of this thesis was to gain insight into why and what happens when highlevel alpine ski racers cope with competitive stress and why and what happens when they do not. Moreover, to get insight into the factors which are associated positively and negatively with the ability to cope with competitive stress. IPA qualitative interviews (Smith et al., 2009) with the high-level alpine ski racers about the two stressful scenarios yielded a rich spectrum of stories which have contributed to answering these questions. The findings of this thesis showed that a range of training/preparation, team, and personal variables influenced the ski racers' ability to cope with competitive stress, in both a positive and a negative manner. These are interesting findings for skiers and their coaches, as well as from an academic perspective. It seemed that many of the ski racers' own experiences were in accordance with many postulates of the CATS (Eriksen & Ursin, 2006; Ursin & Eriksen, 2004), and that this framework helped to shed light on and explain many of the findings in my study. Consequently, it seems that this is a fruitful conceptual framework that has great potential in future sports psychology research. Finally, on the basis of the results of this study, it can reasonably be concluded that "skiing is more than a parallel turn", which was Inner Skiing (Gallwey & Kriegel, 1977, p. 4) and this thesis starting point.

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# **Appendix**

Appendix A – Information letter and consent form

Appendix B – Interview Schedule

Appendix C – Ethical approval from the Norwegian Social Science Data Services (NSD).

#### Appendix A

### Forespørsel om deltakelse i mastergradsprosjekt

Jeg er for tiden i gang med mitt mastergradsprosjekt i coaching og idrettspsykologi ved Norges Idrettshøgskole. Temaet for prosjektet er stresshåndtering i alpint, og jeg ønsker å undersøke hvilke stresshåndteringsstrategier som benyttes av elitealpinister. Målet med prosjektet er å få bedre innsikt i hvilke strategier som vurderes for å være mer eller mindre effektive for å håndtere stress i idrett. Forhåpentligvis vil prosjektet i sin ferdigstilte form bidra til økt kunnskap om mentale prosesser i alpint, og på den måten bidra til nyttig kunnskap for alpinsporten.

For å finne ut av dette, ønsker jeg å intervjue 5-8 personer som har erfaring med alpint og stressende konkurransesituasjoner. Spørsmålene vil dreie seg om situasjoner hvor utøvere har opplevd prestasjonsrelaterte stressfaktorer og hva som ble gjort for å håndtere disse. Jeg vil bruke båndopptaker og ta notater mens vi snakker sammen. Intervjuet vil ta omtrent 60-90 minutter. Hvor og når intervjuet skal foregå bestemmes på bakgrunn av hva som passer best for den enkelte utøver.

Det er helt frivillig å være med i dette prosjektet og du har mulighet til å trekke deg når som helst underveis, uten å måtte begrunne dette nærmere. Alle opplysningene vil bli behandlet konfidensielt, og er underlagt taushetsplikt.

Når prosjektet avsluttes i mai 2012 vil alle opptak slettes og datamaterialet anonymiseres. Opplysninger som fremkommer i masteroppgaven vil ikke kunne tilbakeføres til enkeltpersoner.

Prosjektet er tilrådd av Personvernombudet for forskning, Norsk samfunnsvitenskapelig datatjeneste

På forhånd takk for hjelpen! Med vennlig hilsen

Christian Magelssen (Prosjektansvarlig) Telefon: 97006443

E-post: cmagelssen@gmail.com

Anne Marte Pensgaard (Veileder)

E-post: anne.marte.pensgaard@nih.no

#### Samtykke til deltakelse i studien

Jeg har mottatt informasjon om studien av stresshåndtering i alpint og er villig til a	å
delta i studien.	
(Prosjektdeltaker, dato)	

#### Appendix B

## Intervjuprogram:

#### Stresshåndtering blant kvinnelige elitealpinister

Jeg ønsker å intervjue deg for å høre dine erfaringer med stresshåndtering under alpinkonkurranser. Intervjuets form er at jeg ønsker innblikk i din erfaring, og derfor ønsker jeg at du forteller så mye som du evner om dine opplevelser og erfaringer. Det finnes ingen riktige eller gale svar, jeg er kun interessert i dine erfaringer og opplevelser. Jeg har ikke noe hast, så ta deg gjerne god til å tenke og snakke. Intervjuet vil vare i cirka en time.

#### Intervjuet er:

- Konfidensielt og alt du sier vil bli anonymisert slik at det ikke kan spores tilbake til deg.
- Du har mulighet til å trekke deg når som helst i løpet av intervjuet, uten videre begrunnelse. Og samtidig få alle registrerte opplysninger om deg slettet.

#### 1. Vennligst fortell om idrettskarrieren din

- a) Når begynte du med alpint?
- b) Hvorfor begynte du med alpint? Hvorfor holder du på med alpint i dag?
- c) Hvilken disiplin er det du satser mest på?
- d) Hva vil du si er den beste idrettsopplevelsen din i alpint?

# 2. Vennligst fortell om en konkurransesituasjon der du opplevde mye stress og håndterte dette bra. Med stress mener jeg en sitasjon hvor du følte at det som krevdes var mer enn det du egentlig var i stand til å klare/takle.

- a) Fortell mer om hvordan du opplevde denne situasjonen?
- b) Hva var det som gjorde at du opplevde stress i denne situasjonen?
- c) Hva fikk det deg til å føle eller tenke?
- d) Hvorfor klarte du å håndtere dette bra?

# 3. Vennligst fortell om en konkurransesituasjon der du opplevde mye stress, men ikke håndterte dette bra

- a) Fortell mer om hvordan du opplevde denne situasjonen?
- b) Hva var det som gjorde at du opplevde stress i denne situasjonen?
- c) Hva fikk det deg til å føle eller tenke?
- d) Hvordan håndterte du dette? / Hva gjorde du?

### Appendix C

#### Norsk samfunnsvitenskapelig datatjeneste AS

NORWEGIAN SOCIAL SCIENCE DATA SERVICES

Anne Marte Pensgaard Seksjon for coaching og psykologi Norges idrettshøgskole Postboks 4014 Ullevål Stadion 0806 OSLO

Harald Hårfagres gate 29 N-5007 Bergen Fax: +47-55 58 96 50 nsd@nsd.uib.nc www.nsd.uib.no Org.nr. 985 321 884

Vår dato: 07.09.2011

Vår ref: 27743 / 3 / PB

Deres dato:

Deres ref

#### KVITTERING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 18.08.2011. Meldingen gjelder prosjektet:

27743 Prestasjon under press: En fortolkende fenomenologisk analyse (IPA) av elitealpinisters

effektive og ineffektive coping opplevelser

Norges idrettshøgskole, ved institusjonens øverste leder Behandlingsansvarlig

Anne Marte Pensgaard Daglig ansvarlig Christian Magelssen Student

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, eventuelle kommentarer samt personopplysningsloven/helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, http://www.nsd.uib.no/personvern/forsk\_stud/skjema.html. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, http://www.nsd.uib.no/personvern/prosjektoversikt.jsp.

Personvernombudet vil ved prosjektets avslutning, 31.05.2012, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen Vigdis Namtvedt Kvalheim

Perulla Bollman

Kontaktperson: Pernilla Bollman tlf: 55 58 24 10

Vedlegg: Prosjektvurdering

Kopi: Christian Magelssen, Stensgata 18, 0358 OSLO