



Accepting or avoiding fear

- A study of how elite freestyle snowboarders
experience and cope with snowboard-related fear
from an Acceptance and Commitment Therapy
perspective

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Abstract

Elite freestyle snowboarders often expose themselves to large risks while performing their sport. A natural response to risk is fear, and it is the aim of this study to explore how elite freestyle snowboarders experience and cope with emotions of fear in conjunction with performing their sport. When examining these mechanisms, Acceptance and Commitment Therapy (ACT) will be used as the theoretical framework. The aim is to try to determine if the riders accept or avoid situations, thoughts and emotions of fear.

Data was collected through semi-structured interviews with seven elite freestyle snowboarders (six men and one woman). The content of the interviews were processed with theory driven thematic analysis and inductive thematic analysis.

The analysis revealed eight themes related to the athletes' experience of fear: (1) *Sources of fear*, (2) *Fear inducing events and situations*, (3) *Physiological responses*, (4) *Cognitive changes*, (5) *Action tendencies*, (6) *Fear appraisal*, (7) *Fear and risk* and (8) *Fear as a problem*. In the analysis of the participants' coping strategies for fear two themes emerged: *Coping strategies not related to ACT* and *ACT-related coping strategies*.

It can be concluded from this study that elite freestyle snowboarders at times experience fear when exposed to high risk of injury, and can interpret this experience both as a negative and positive for well-being and performance. Participants use a range of coping strategies for fear; some which are in line with traditional sport psychology with an avoidance approach. Despite no previous ACT training, some participants have developed an accepting approach to relate to fear. The complexity of ACT as a theoretical framework is also demonstrated in this study due to the difficulties in categorizing the distinction between processes and orientations of strategies.

Keywords: ACT, Acceptance and Commitment Therapy, Elite athletes, Fear, High-risk, Snowboarding, Sport

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1 Introduction

In elite freestyle snowboarding and skiing the risk of sustaining serious injury is always present (Seino, Kawaguchi, Sekine, Murakami, & Yamashita, 2001; Torjussen & Bahr, 2005; Torjussen, J, & Bahr, 2006). High profile examples of this are Winter X Games gold medalist, Kevin Pearce, who in 2009 sustained a career ending traumatic brain injury while half-pipe training, and freestyle skier and Winter X Games gold medalist, Sarah Burke, who died in 2012 of injuries sustained in a crash in the same halfpipe (ESPN). In this high-risk sport environment, it is relevant to examine fear from a perspective of experience and management. This is however a research topic that has only generated limited research, especially in elite sports.

1.1 Background

Freestyle snowboarding became an organised competitive sport in the late eighties and was further developed such that half-pipe snowboarding was included in the Olympics for the first time in 1998. In the winter Olympics in Sochi 2014, slopestyle was included in the programme. In slopestyle the rider performs tricks on different features of a course. The features can include jumps of different types as well as rails and boxes. Rails and boxes are structures made of metal, wood or plastic which are designed to glide upon, with varied degrees of athletic challenge. A half-pipe or quarter-pipe can also be included in a slopestyle course. Competitive freestyle snowboarding is still developing and at a fast pace; the features are getting bigger and the tricks are getting more difficult. With these developments, and given that snow conditions are varied and hard to control, freestyle snowboarding is increasingly becoming a high-risk sport.

When participating in a high-risk sport, athletes are confronted with perilous situations on a regular basis. How athletes perceive a situation and how they react can vary between individuals, and within individuals. In dangerous situations some people panic and lose focus, whereas others react with confidence and calmness (Miesel & Potgieter, 2003, p. 50). A natural reaction to such situation is fear. Nevertheless, athletes are expected to continuously perform at their highest level in all types of conditions. Effective coping strategies for fear are very likely important to ensure a top performance in a high-risk sport.

Previous research on coping strategies for fear in sport has focused on sources of self-efficacy and has identified coping strategies utilising cognitive control (Miesel & Potgieter, 2003; Chase, Magyar, & Drake, 2005). These studies utilise theoretical frameworks based on avoidance of fear and cognitive control. In contrast to this, Acceptance and Commitment Therapy (ACT) advocates that trying to avoid or remove intrusive thoughts or feelings will only increase the suffering they give rise to (Harris, 2006, p. 4). It is the aim of this study to examine fear, using ACT as a theoretical framework.

1.2 The emotion of fear

Fear or fright is one of the fundamental emotions of man (Lazarus, 2000, p. 234). Lazarus (2000, p. 234) defines the source for the emotion of fright as “an immediate, concrete, and overwhelming physical danger”. Fear can also be described as “the experience of a threat that one feels uncertain about being able to cope with “ (Frijda, 1999, p. 196) .To understand the experience of an emotion it is helpful to divide it into components. According to Frijda (1999) each emotion has five different components: affect, appraisal, action readiness, autonomic arousal and cognitive activity changes. Affect refers to the initial subjective experience of pleasure or pain whereas appraisal means appraising an event or object as good or bad, pleasant or unpleasant. Appraisal also includes evaluations of why an event or object is good or bad. Action readiness is the emotional phenomena of motivation to act, or readiness to change the interaction with the environment. Another way to describe this concept is action tendencies. Autonomic arousal entails correlated physiological variables such as heart rate, respiration and perspiration. Finally, according to the framework, fearful emotions also induce changes in cognitive activity, such as changes in control of attention.

1.3 Acceptance and Commitment Therapy

Acceptance and Commitment Therapy (ACT) is a behavioural therapy utilizing acceptance and mindfulness techniques. The goal is not to reduce symptoms but to be mindful, to accept that suffering is a part of life, and to take committed action towards what is important in life (Harris, 2009, p. 12). Rather than a direct target of ACT, symptom reduction is seen as a by-product of the therapy. ACT is described in a pedagogical way in the ACT hexaflex (Harris, 2009, p. 10). The hexaflex illustrate the six core therapeutic processes of ACT, which are sometimes referred to as psychological flexibility. The processes include: *Contacting the*

Present Moment, Defusion, Acceptance, Self-as-Context, Values and Committed Action (Figure 1). ACT was developed by psychologists working in a clinical environment, and has successfully been used to treat Obsessive-compulsive Disorder, depression, chronic pain and many further mental illnesses (Dahl, Wilson, & Nilsson, 2004; Twohig & Hayes, 2006; Zettle & Raines, 1989).

1.3.1 Therapeutic processes of ACT

Contacting the Present Moment means that a person is being fully present in what he/she is doing right now. It is easy to get caught up in thoughts and emotions or simply being distracted and performing on autopilot. Another way to describe this concept is being fully conscious of an experience or mindfulness. When someone gets caught up in thoughts and emotions, they can sometimes completely take over the entire attention and become factual truths for that person. *Defusion* or *Cognitive Defusion* means detaching oneself from one's thoughts. The aim is to see thoughts for what they are, which is words and pictures, thus preventing them from guiding behaviour.

Acceptance means that an individual is opening up to all thoughts and emotions that he/she is experiencing, and accepting them. Instead of struggling and fighting to avoid them, they are given room to just be present. Accepting their presence does not require liking all of these emotions and thoughts. If for example a rider experiences feelings of fear before a snowboard run, the ACT way to deal with them would be to accept that those feelings are there and allow them experiential space.

Each day people have thousands of thoughts including: judgements, plans, fantasies, memories and more. These thoughts are generated from *The Thinking Self*. The other part of the mind called *The Observing Self* is capable of self-awareness of the ongoing stream of thoughts. The notion of a mind being aware of what it is thinking is referred to as *Self-as-Context*.

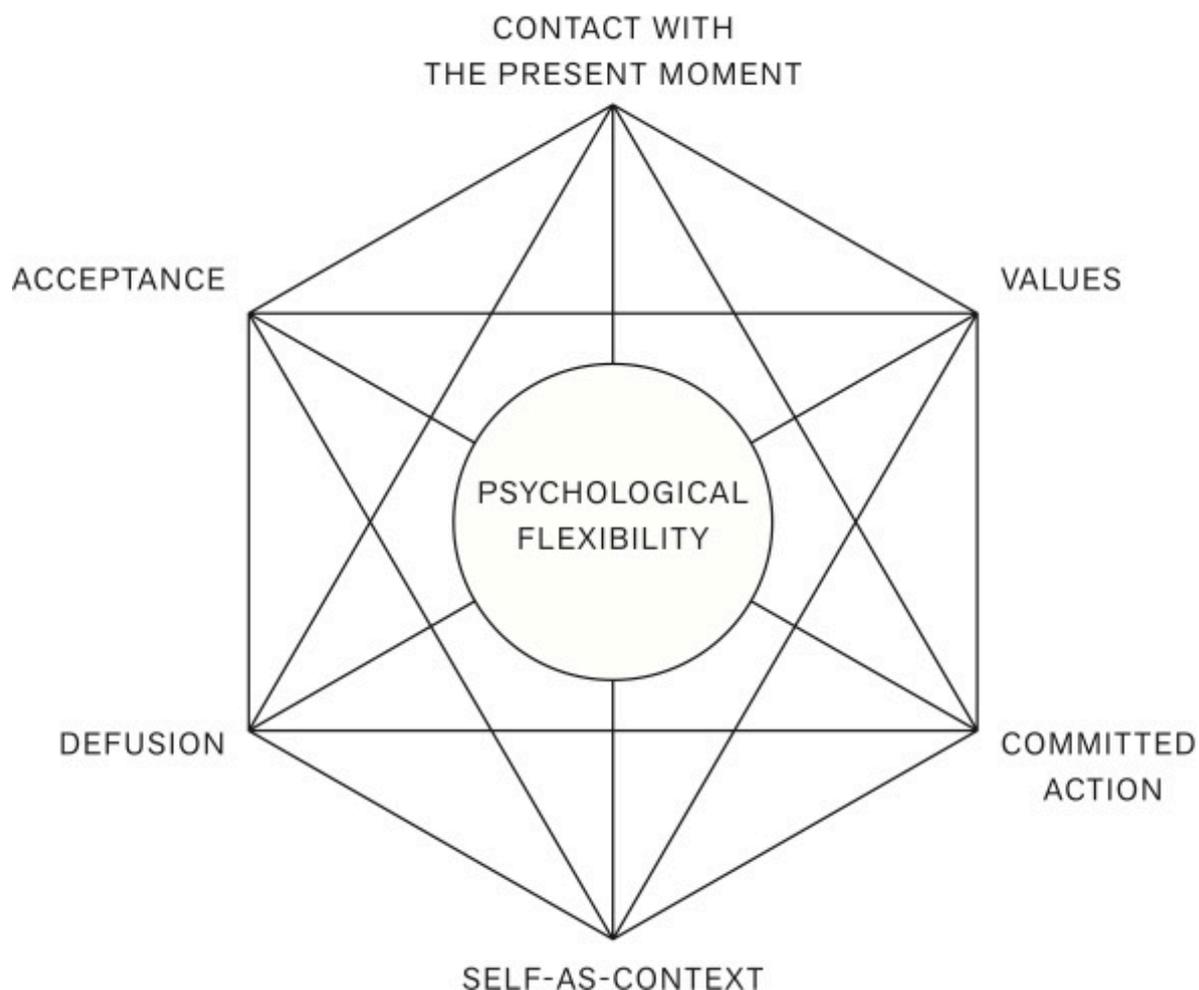


Figure 1 - The ACT Hexaflex (adapted from Harris, 2009, p. 10)

Values describe the direction a person wants to move towards in life. They illustrate what is important, what really matters, what a person stands for. Sport-specific values describe what kind of athlete a person wants to be and how he/she wants to perform his/her sport. Closely related to values is the concept of *Committed Action*. Taking committed action, means doing actions that lead a person in alignment of his/her values.

The six core therapeutic processes articulated in the ACT model are not considered independent components; more like interactive aspects (they overlap and are interconnected). Being present in the moment may often entail accepting uncomfortable feelings and to take committed action, an individual requires values.



Figure 2 – ACT Model of Psychopathology (adapted from Harris, 2009, p. 27)

1.3.2 Pathological processes of ACT

In contrast to healthy psychological flexibility one can also be psychological inflexible, which is explained in a different hexaflex: the ACT Model of Psychopathology, see Figure 2 (Harris, 2009, p. 27). In this model the six core pathological processes are described: *Dominance of the Conceptualized Past and Future; Limited Self-Knowledge*, *Cognitive Fusion*, *Experiential Avoidance*, *Attachment to the Conceptualized Self*, *Lack of Values Clarity/Contact* and *Unworkable Action*.

Dominance of the Conceptualized Past; Future/Limited Self-Knowledge is the lack of mindfulness. The individual has lost contact with the present moment and dwells on painful memories and brood over why things in the past happened a certain way and what could have happened had the circumstances been different. Worrying over the future and possible

outcomes from a situation is seen as another way to lose contact with the here-and-now experience. Unhelpful thoughts such as “I am bad”, “I will lose” or “it is too hard” can take over an individual’s entire awareness and have a vast impact on his/her behaviour. Becoming totally caught up in such thought patterns is in ACT described as *Cognitive Fusion*.

A common reaction to negative thoughts and emotions is to get rid of them. The ACT term for this is *Experiential Avoidance*. An example of this is when an individual tries to avoid actual thoughts and emotions by attempting to push them away or by avoiding the experience or situation that is causing them. *Attachment to the Conceptualized Self* refers to an individual strongly identifying with the description of him/her produced by others of himself/herself. If this description of who he/she is as person is held lightly, it can help the individual define values and provide a sense of self. However if this description turns into cognitive fusion, it is likely to cause problems.

When behaviour is guided by avoidance of stressors and fusion with negative thoughts, an individual can lose touch with his/her values. This prospect is referred to as *Lack of Values Clarity/Contact*. At the other extreme, fusing with values can make them strict rules, resulting in a change of the motivation for action. *Unworkable Actions* are acts that are guided more by experiential avoidance than by values, or the avoidance of acts that will lead into a stressful situation. They are more likely to be a result of an impulse or an automatic reaction than mindful acts with a purpose connected to values. Often these acts do not work in the long run and increase struggling and suffering.

1.4 Fear and avoidance in sport

The concept of fear in sport is not a widely researched area. Often the term “fear” is used in reference to anxiety but the difference is often not clearly distinct (Miesel & Potgieter, 2003). One aspect of fear that has generated scientific interest is fear of re-injury when returning to sport after reconstructive knee surgery (Ardern, Taylor, Feller & Webster, 2012; Bjordal, Arnoy, Hannestad, Strand, 1997; Kvist, Ek, Sporrstedt, & Good, 2005). Fear of injury has also been examined in relation to anxiety and self-efficacy (Cartoni, Mingato & Zelli, 2005; De Pero, Mingati, Pesce, Capranica, & Piacentini, 2013). Fear in relation to a sport with a high-risk profile has also been examined; a review of the literature revealed three qualitative studies that examined fear and coping strategies in high-risk sport.

Chase et al. (2005) interviewed gymnasts on their fear of injury, sources of self-efficacy and coping strategies for fear. Strategies such as imagery, thought stopping, relaxation and positive self-talk were identified. The researchers argue that many of the coping strategies utilized by the participants in the study are based on avoidance of the fearful task, and that this often leads to more avoidance and difficulties in overcoming their fear. This interpretation is in line with the ACT perspective, however ACT is not explicitly noted in the study. The experience of fear in ski racing, rock-climbing, kayaking and gymnastics was examined in Miesel & Potgieter (2003). Participants reported examples of fearful experiences and how they had difficulties regaining confidence after highly fearful situations. Motivational self-talk, visualisation and relaxations were examples of mental strategies utilized to cope with fear. These however are examples of avoidance strategies, and the authors argue that the participants seem to use denial of the risks involved as a coping strategy for fear. Brymer & Schweitzer (2013) interviewed participants in extreme sports such as big wave surfing, waterfall kayaking, extreme mountaineering, solo rope-free climbing, BASE-jumping and extreme skiing about fear. In contrast to the two other studies, participants in these extreme sports experience intense fear but have an embracing relationship to fear that very much resembles *acceptance*. The athletes recognize that they are not always in total control of the future and continue to participate in their sport fully, resulting in experiences that are described as magical or that cannot be described in words.

1.5 Mindfulness based theories and Acceptance and Commitment Therapy in sport

Fear in sport has to the present authors knowledge, not previously been researched with ACT as a theoretical framework, or from any type of mindfulness or acceptance perspective. Of relevance are intervention studies for performance enhancement with other mindfulness based theories such as Mindfulness-Based Cognitive Therapy (MBCT), Mindful Sport Performance Enhancement (MSPE) and the Mindfulness-Acceptance-Commitment (MAC) Protocol (Bernier, Thienot, Codron, & Fournier, 2009; De Petrillo, Kaufman, Glass, & Arnkoff, 2009; Kaufman, Glass & Arnkoff, 2009; Schwanhausser, 2009; Wolanin & Schwanhausser, 2010), but the published results are varied. Most of this research has been performed on recreational and collegiate populations in sports such as golf, long distance running, archery, diving, field

hockey and volleyball, which have a considerably lower risk profile than freestyle snowboarding.

Only two studies using ACT as an intervention method have been found. One intervention study comparing ACT and hypnosis found improvements in a rowing exercise for high-level canoeists in both intervention groups (García, Villa & Cepeda, 2004). Another ACT intervention significantly improved performance in five out of seven young promising chess players in the intervention group, whereas the control group showed no such improvement (Ruiz & Luciano, 2009). Bernier et al. (2009) utilized some elements of ACT in an intervention study with young elite golfers, which resulted in performance enhancement during competition. To summarize the state of the art in research on fear in sport, it is scarce, as is research on ACT and other mindfulness theories. There exists no research on fear or ACT in snowboarding. This research project aims to fill the gap in the current knowledge and increase our understanding of these mechanisms in a snowboarding context.

1.6 Aims and Objectives

The overall aim of this study is to explore how elite freestyle snowboarders experience and deal with fearful thoughts and emotions in conjunction with performing their sport. The first research objective includes examining the athletes' experience of fear. The second research objective is to examine the participants' coping strategies for fear from a perspective of psychological flexibility as defined in the ACT Hexaflex (Harris, 2009, p. 10).

2 Method

2.1 Participant recruitment and characteristics

The participant recruitment process was initiated by contacting the manager for the Swedish national team in the freestyle disciplines for snowboarding. After the aims and objectives of the study were explained, the team manager agreed to assist in recruitment of participants. The team manager emailed the participant information letter (see Appendix B) to eleven riders and asked their permission to be contacted by the researcher, which all approved of. All participants were then contacted via phone to inform about the study and to ask if they wanted to participate. Out of the eleven athletes, seven participants (six men and one woman, which

is representative for elite snowboarders in Sweden) with the average age of 21.7 ± 3.2 (mean \pm SD) years chose to participate in the study. The participants had an average of 12.3 ± 2.6 (mean \pm SD) years of experience in the sport and all competed on the World Cup tour organized by FIS and the World Snowboard Tour organized by the World Snowboard Federation (WSF) in Slopestyle, which are the two worldwide international snowboard tours. Experience and results on the international snowboard tours varied within the group from several years of experience and top results to doing their first international competitions.

2.2 Data Collection Method

Due to the mixed nature of research questions in this study (with an explorative component of how the athletes define, experience and cope with fear and the examination of psychological flexibility from a theoretical perspective) the most suitable method of data collection were semi-structured interviews (Hassmén & Hassmen, 2008, p. 255). According to Lantz (2007, p. 14), semi-structured interviews are an appropriate method of data collection when the aim is to reflect the participants' view of the world, which is one of the research objectives in this study.

The interview guide (see Appendix D) was constructed from the research questions and addressed topics such as sources and effects of fear, factors influencing fear, and coping strategies. Many questions referred to specific situations freestyle snowboarders can find themselves in, where thoughts and feelings of fear are likely to be present. These questions were developed from the author's experience and comprehension of the sport. Questions were also developed from the ACT hexaflex (Harris, 2009, p. 10) and the ACT Model of psychopathology (Harris, 2009, p. 27). Only themes that were likely to be used and relevant for the participants were developed into questions. As suggested by Trost (2005, p. 51), the sequencing of questions does not need to be exactly the same in all interviews. The participants "decide" the sequencing in the way that questions are asked as a consequence of previous answers. During the interviews this approach was used and the interview guide was not always followed exactly word for word both in question sequencing and phrasing. Probes and other questions aimed at clarifying or elaborating on certain topics related to the research objectives were used to ensure rich and credible data (Gratton & Jones, 2010, p. 161).

The first draft of the interview guide was peer-reviewed by the author's fellow students as well as by the project supervisor. Six pilot interviews were performed with two skiers and four snowboarders with experience riding snow park features, although not at the same competitive level as that of the participants in the main study. During four pilot interviews audio was recorded, in order to evaluate the interview guide and the technique of the interviewer. One pilot interview was videotaped to analyse body language and other visual behaviour of the interviewer. All participants in the pilot interviews gave feedback on the questions and technique of the interviewer. After each pilot interview the interview guide was adjusted and improved.

Before the interview began all participants were asked to read through the participant information letter (Appendix B) again and asked if they had any initial questions. All participants gave their written informed consent (see Appendix C) before the interview commenced. The participants were also verbally reminded that there are no right or wrong answers and that they had the right to not answer a question if they did not want to. Participants were also encouraged to ask for clarification if they did not understand a question. After some background questions it was explained that the interview topic was fear while performing their sport, and they were told to disregard feelings of fear or anxiety related to being unsuccessful in competition.

The participants were not informed about the use of the theoretical framework prior or during the interview to prevent subject bias (Gratton & Jones, 2010, p. 93). The theory of ACT was explained at the end of the interview and participants were asked to comment or reflect on the theoretical framework.

2.3 Data Analysis

The length of the interviews ranged between 45 min and 1 hour and 19 min, and they were recorded using the "Wavepad app" on an iPad 2. The author transcribed all interviews verbatim, which resulted in 123 pages of single-spaced text. To ensure reliability of the transcriptions every interview was reread while listening to the audio file of the interview, which led to some adjustments of the text. To ensure face validity, each transcription was emailed to each participant to give them opportunity to read through and change or clarify their answers (Gratton & Jones, 2010, p. 94). The participants were informed that if they did

not reply to the email within two weeks, the author would consider that an endorsement of the transcription. None of the participants chose to change or clarify their answers.

After the transcription phase, each interview was read and reread by the author to familiarise herself with the data. The method of analysis used was a combination of inductive thematic analysis and theory-driven thematic analysis (Hassmén & Hassmen, 2008, p. 349). While reading the transcriptions the parts that were relevant to the aims and objectives were identified as codes and highlighted. These parts were then transferred to two separate lists, one for each research objective. The list containing codes related to the experience of fear was further organized into categories and themes loosely based on Frijdas (1999) definition of the components of an emotion. Within this analysis, inductive themes, categories and sub-categories were created to make sense of the data. The codes and categories on the list related to coping strategies were then identified as either not related to ACT or as ACT therapeutic processes (Harris, 2009, p. 10). The strategies not related to ACT were categorized and then subcategorized inductively into other themes. Creating a summary of all themes and selection of illustrative quotes were the last part of the analysis. Quotes were translated from Swedish to English and rewritten from colloquial language to more written language.

3 Results

During the interviews, different types of fear and many emotions related to fear was discussed. As previously stated the participants in this study were not given a definition of fear to relate to when answering the questions. The only given instruction was to disregard feelings of competitive state anxiety. Competitive state anxiety was still discussed during the interviews when participants were asked about emotional states before competitions.

Participants recognized the difference between the two emotions but acknowledged that they frequently arise simultaneously. One participant could not identify which emotion he felt before a competition. Performance worry has also been removed from the analysis, which by one participant was described as a worry of performance outcome however not related to the competitive result. In one interview the participant was quite tired and disengaged.

Approximately 40 minutes into the interview, which lasted 71min, the participant is perceived by the interviewer to be somewhat irritated over the questions. The validity and reliability in the answers given after this point in the interview, is deemed too low for any trustworthy interpretations, and has therefore been removed from the analysis.

3.1 The athletes' experience of fear

The data regarding the participants' experience of fear was analysed and arranged into themes based of the research question, Frijda (1999) components of emotion model, and some inductive analysis. The following six themes emerged from the data analysis process: (1) *Sources of fear*, (2) *Fear inducing events and situations*, (3) *Physiological responses*, (4) *Cognitive changes*, (5) *Action tendencies*, (6) *Fear appraisal*, (7) *Fear and risk* and (8) *Fear as a problem*. Action tendencies are presented as ACT pathological processes. The emotional component “affect” by Frijda (1999) is described when applicable.

3.1.1 Sources of fear

Figure 3 describes the participants' sources of fear in snowboarding. All sources of fear are related to fear of injury. Participants fear both objects and events that can cause injury, as well as the result of injury.

Code	Subcategory	Category	Theme
Big jumps (2) Badly constructed features (4) Rails (1)	Features	Conditions leading to injury	Sources of fear
Icy (3) Wind (5) Wet snow (1) Speed problems (1) Falling snow (2)	Weather conditions		
Not making it to the landing (2) Crash leading to injury (6) Incident leading to re-injury (1) Landing on your head (1)	Performance failure	Performance leading to injury	
Trying new tricks (4) Trying trick you previously crashed on (3) Trying a jump for the first time (2)	Unknown performance		
Being away from sport due to injury (2) Missing important competitions (1) Being injured the whole season (1) Injury not healing completely (1) Career ending injury (2) Not being able to walk (1)	Not being able to ride	Result of injury	

Figure 3 – Hierarchal structure of the theme “Sources of fear” (number of participants reporting code)

3.1.2 Fear inducing events and situations

Crashing badly and injuring themselves will make many riders feel fear about doing that trick again. One rider, who injured his knee in a crash three years prior to the interview, described how he has not performed that trick since. However not every crash will have such impact, riders reported it being dependent on the situation. Another rider described a crash that resulted in an injury requiring him to spend three months in a wheelchair and almost a year in rehabilitation. However this incident did not produce any feelings of fear about riding again. The incident made him even more motivated to start snowboarding again and become a better rider to prevent it happening again. The experience of the crash does not impair the rider's current performance and he has no problem performing the same trick.

Seeing other riders perform well on features that look scary or big jumps on windy days makes the participants feel less fear of trying it out themselves. However fear can be increased if the situation is reversed and they see other riders crashing, especially if the rider already thinks the conditions or the feature look bad. Seeing a person crashing on the feature or on the trick they are about to do also increases participants' fear. As one participant expressed it: "If for example a rider hits a jump and it looks really bad, and it's the same for the next rider, then you can see that it was not fun for them. They probably feel fear when they come down or have had a near death experience. That is something that can ruin your self-confidence". Many participants did point out that they often want to try features for themselves before making up their mind, and if the rider crashing is not considered a better rider than himself/herself, they are not affected by the situation. The same applies if other riders talk about feeling fear. If another such rider is considered better than oneself it will have a larger impact on the participant's fear.

The participants' experience of fear differs between training and competition settings. Four riders experience more fear during training than in competition. One participant described it like this: "In practice fear is closer. [...] In competition it is decided that I am going to do this [...]. It doesn't matter; I will do this, so now I am just focused. But in practise I always have a choice, I don't need to do this, I can take the easy way out instead. So I think it is more difficult to overcome fear in practice than in competition". Other riders feel more fear in competitions than in practise. The fact that they "have to ride" in competition increases their fear. Many riders also expressed how their risk appraisal differs from practice to competition. In competition they will take larger risks and ride on features and in conditions they would

not ride on in practice. This is due to the higher motivation and sense that the competition runs are worth more than a practice run.

3.1.3 Physiological responses

Participants reported several different physiological responses to fear (Table 1). Some were described as positive and some as negative (for more detailed description see section 3.1.6). Many riders described feeling nervous but had difficulties describing it more vividly than that. One rider described these consistent nervous feelings like: “Its like when you are out driving a car and you are driving too fast. Then you see the police up ahead and you get this feeling of stress in your body: shit, now its over [---] sometimes its nice to get that feeling sometimes you really don’t want to feel it”. One rider also reported how this nervousness is impossible to get rid of: “when you are at the start before you have made your run and feel nervous and a little bit of fear, [...] you cant just forget about it and not be nervous and afraid. That is impossible.”

Table 1- Perceived physiological responses due to fear

Physical responses	Participants
Nervousness	3
Increased intensity of focus	2
Uncomfortable feeling	2
Adrenaline	1
Angry and irritated	1
Bad feeling	1
Lump in stomach	1
Prickling in fingers	1
Stress	1
Tense body	1

Increased intensity of focus is another reaction to fear described by two riders: “If you think about when you get frightened or something, you always get really alert for a while [...]. I guess that is what makes you really focused when you feel fear”.

3.1.4 Cognitive changes

Fear also induces cognitive reactions and changes (Figure 4). All participants reported cognitive reactions to fear, however the number of different cognitions varied between riders.

Some riders only reported one cognitive reaction to fear whereas others described up to six different cognitions. One single rider reported all the cognitions in the category “Thoughts of crashing”. This was also the case for the cognitions in the category “Situational appraisal”, though by a different rider. The codes in the category “Doubts” were reported by three different riders whereas the codes in the category “Thoughts of potential crashes” were reported by six different riders.

The most common reported cognitive reaction was: “I could crash just like that rider”; one rider acknowledged that he quite often has thoughts about crashing the same way he has seen another rider crash, on a trick he is about to do. One of the riders reporting having thoughts about experiencing a previous bad crash again, acknowledged that he often has those thoughts. Another rider described a cognitive reaction that was not really a thought, but more a shift in his centre of attention. Instead of focusing on how to perform the trick, he just thinks about not injuring himself when he feels fear. His attention is entirely directed towards making it to the landing and landing on his feet. All cognitive reactions to fear were described as negative (for a more detailed description see section 3.1.6).

Code	Category	Theme
Will I make it to the landing? (1) Can I handle the compression? (1) Shall I do this or not? (1)	Doubts	Cognitive reactions to fear
I will land short (1) This will go bad (1) I will land on my head (1) I will injure myself (1)	Thoughts of crashing	
I could crash like this again (2) I could crash just like that rider (3) I can injure myself (1)	Thoughts of potential crashes	
These jumps are scary (1) I have to do it but don't really want to (1) I can't perform, because it is too difficult (1) This is no fun (1)	Situational appraisal	

Figure 4 – Hierarchical structure of the theme “Cognitive reactions to fear” (number of participants reporting code)

3.1.5 Action tendencies

Four ACT pathological processes were identified among the athletes: *experiential avoidance*, *cognitive fusion*, *attachment to the conceptualized self* and *dominance of the conceptualized past and future/limited self-knowledge*. Participants most frequently described pathological process was *dominance of the conceptualized past and future*. Much of what was described in the previous section illustrates how participants are not being present in the here and now. Riders get caught up in their upcoming performance and worry about the outcomes. Sometimes when riders realise they are having these thoughts, they try to push them away in a cognitive version of *experiential avoidance*. The fact that the participants at times try to get rid of negative thoughts can be seen as a reaction to *cognitive fusion*. The negative thoughts they are experiencing are interpreted as negative and the interpretation in itself can lead to *cognitive fusion*.

Three riders described more physical examples of *experiential avoidance* due to fear. Two riders described how they planned to ride or ride switch on a specific feature during a competition, but during practice they avoided the feature or riding switch because they felt fear. Later during the competition runs, riders rode as they have planned but failed to perform due to the lack of training on the specific feature. A third rider described a scenario during a film session where he had planned to perform a certain trick but then changed his mind and performed a trick he was more comfortable with. He described how the decision not to do the originally planned trick was not based on a risk assessment, but on fear alone. It is possible to interpret some of these actions of experiential avoidance as *unworkable actions* or *lack of values clarity/contact*.

Two riders described examples of *attachment to the conceptualized self* that can or has been negative for physical and mental health. One rider described himself as a rider with good ability that has been riding for 12 years. This self-description can work as a coping strategy in a situation where he must ride on a jump that looks scary. It works in a scenario where he sees a less experienced rider having trouble in that jump; the self-description gives him confidence. If however one of the best riders in the world has trouble on the same jump, ability and 12 years of experience will be seen as not enough, and the self-description will work negatively for his mental state and increase his fear. Another rider had a self-description in the lines of “I am a rider that always tries stuff before I make up my mind”, which can also

sometime turn into *fusion* with the *value* “always try a jump before you make up your mind”. This works in a positive way when the rider can ride on features that look scary that the rider is capable of riding. However the rider also described how the self-description has lead to several injuries where the rider has taken unnecessary risks.

3.1.6 Fear appraisal

Several riders described a sort of fear continuum in terms of magnitude. In the lower end, fear was seen as a positive feeling that increases focus and performance. Several riders described positive states of fear with increased focus, adrenaline, performance as well as physical arousal. However if the rider is in the other end of the continuum and feels too much fear, performance is impaired or totally hindered. One rider described how the feeling of fear affects performance: “Of course it effects a bit, it’s like a barrier that sits there. I think everybody has it [...], you just got to get over it”.

Others defined fear as a feeling that is only negative. One such rider said: “I would never do anything that I am afraid of”. This rider separates fear from the feeling of being nervous, which is described as feeling apprehensive but with a positive feel to it and feeling stoked. Some riders mentioned fear as a positive thing when linked to risk assessment. Fear is seen as a sound reaction to risk that prevents riders from taking unnecessary risks and riding over their own ability. Riders emphasized that having respect for the features and the tricks they perform is important to prevent injury and to “stay alive”. Also the riders that reported not experiencing feelings of fear emphasize the importance of risk appraisal in their sport.

3.1.7 Fear and risk

When it comes to the relationship between fear and risk appraisal, two different views emerged from the data. Some riders claimed that they are closely related or that there is no difference between the two. The main argument is that they feel fear because of the risks. Two riders had a different view where fear and risk appraisal were deemed as different concepts. One rider described it as if you decide not to ride because you feel fear, you are “taking the easy way out” and not doing it even though it’s possible. It would be the right decision however if you decide not to ride because something could be fatal. Another rider described it as a much better feeling if you for example decide not to ride because of bad

conditions and making a sound risk appraisal. The main argument was that other riders cannot ride on those conditions either and he is not worse than anyone else. In the other scenario where he would decide not to ride because of fear it would be his own ability standing in the way of performance and that would generate very negative feelings. It is worth noting that this rider reported never feeling this kind of fear and never having made the decision not to ride because of fear. In the few situations where he decides not to ride it is always based on risk appraisal.

3.1.8 Fear as a problem

The extent to which the participants perceived fear to be a problem differed within the group. Four riders did not perceive it as a problem and two riders perceive it to be somewhat of a problem. With the fast progression in the sport, fear was seen as an impediment to keeping up in the development of new tricks for one rider, and for another as an obstacle for personal progression in a straight upward line. The female rider acknowledged it as a major problem during almost every competition because of the big sized jumps. Her concern is that the jumps are built for the male riders who are heavier and stronger, making it hard for the female riders to stand against the compression at the take-off and gathering enough speed to safely make it to landing. Close friends injuring themselves severely in competitions have increased her fear. The female rider also describes how when she is confronted with feelings of fear, the experience of riding is no longer fun, which she considers a problem. The perception of fear as a problem seems to mostly concern and relate to performance issues and personal safety during competition.

3.2 Identified coping strategies for fear

The participants utilised many different coping strategies for fear. Some resemble the Therapeutic Processes in the ACT hexaflex whereas others are more similar to traditional sport psychology and as follows.

3.2.1 Coping strategies not related to ACT

Several coping strategies for fear were identified that are not related to ACT (Figure 5). Two were strategies to prevent feeling fear. One athlete described an experience during a

competition, where the rider in front of him did not make it to the landing and crashed hard even though going at full speed. This made him question his own chances of making it to landing and induced fear with him. Now he has stopped looking at other people riding during contests and his coach monitors and informs him about the conditions and competition. This rider and one other also often choose to ride first in training if they are riding in a group to prevent the previously described scenario.

Code	Subcategory	Category	Theme
Riding first (2) Not looking at other riders (1)	Prevention strategies	Behavioural strategies	Coping strategies not related to ACT
Not riding (3) Abort run (2) Abort trick (1) Changing tricks (4) Changing direction of trick (1)			
Choosing right people to ride with (2) Support from other riders (5) Support from coach (5)	Social support		
Jumping straight first (1) Gather more information about feature (1)	Feature specific strategies	Training strategies to improve confidence	
Training on trick in safe venues (1) Training on trick in perfect conditions (2) Trying trick straight away after crash (4)	Trick specific strategies		
Practice basic tricks (3) Progress slowly (4)	Strategy for feature or trick		
Music (4) Think about something else (5) Talk to someone about something else (3) Doing something else (2)	Cognitive distraction strategies	Cognitive strategies	
Goal setting (3) Relaxation (1) Focus on what you are about to do (7) Thought stopping (4) Positive thinking (5) Self-talk (2) Visualisation (3) Blaming crash on bad luck (1) Blaming crash on small margins (1)	Cognitive control strategies		

Figure 5 – Hierarchical structure of the theme “Coping strategies not related to ACT” (number of participants reporting code)

Some riders utilize behavioural strategies to physically avoid what they fear; not riding or changing the direction of the trick (e.g. frontside to backside) are examples of such strategies. Many participants described how they might change tricks to something they are more confident with in a competition situation where they feel uncomfortable with a certain feature.

All riders in this study described routine and experience with attendant confidence building as a bulwark against fear. Seven training strategies were identified that help the rider feel comfortable riding with features and tricks, which they are fearful of. One example is from a rider who previously struggled with feelings of fear when learning to perform double corks. He increased his confidence by training on a jump that instead of a normal landing had a big air bag, which meant he could make mistakes without hurting himself. Confidence also expressed itself with the riders as knowledge that a trick or feature will feel less scary after they have tried it once.

Several riders emphasized the importance of coach support for reducing fear. The coach can support the riders by giving verbal encouragement and pushing them to try new tricks. Another important role for the coach is to help with the risk appraisal. Riders are aware that their risk appraisal skills sometimes are reduced when tired or totally absorbed by the competition. Knowing that the coach will tell them if the conditions worsen makes them feel safe and feel less fear about the task. One rider also mentioned that the mere presence of the coach during training makes him feel safer in the way that he knows that someone is watching and that he will get help immediately if something happens.

Support can also come from other riders. Several riders highlighted how verbal encouragement from other riders and seeing other riders overcoming their own fears and succeeding, inspires them to try new things they may have been hesitant about before. One rider said: “Between friends you push each other forward. Someone does a trick [...] then you get stoked about him doing it [---]. Sometimes you get into a mode with the whole crew and everyone do new things. That is fun”. Another rider described difficulties in riding alone: “You ride much better, it’s much easier [...] to try new things and really go for it [...] when you ride with your friends that [...] are stoked [---]. I think it is difficult to be [...] alone on the hill and really go for it”. The female rider described how she likes to ride with male riders: “I really like riding with some guys that I know and that I know are good riders. [...] They

have calmness, [...] they jump and it's cool and they show you how to do it and you may ride after them just to get the feel for it [...]. This makes it feel safe, if you ride after somebody that is stable and calm in his riding". Two riders described how they avoid riders who talk a lot about risks and how afraid they are, which illustrates the importance of the right riding company.

Participants also use what can be described as more cognitive strategies to cope with fear. Many riders identified music as an important coping strategy. Certain songs help riders to get stoked about riding, which in turn, reduces the feeling of fear. One rider described how listening to music produces a feeling of being immortal: "It feels like you have a different [...], immortal path [...] with music. That is nice". The rider continued to describe how music helps preventing thoughts about fear. Another rider talking of music's effect said: "You start thinking about something else [...] when you listen to the music. Its music [...], you can just listen and just enjoy it, [...] instead of [...] thinking. That is probably what makes [...] you steer into different thoughts". Music is also described as a strategy that increases focus and aids visualisation. One rider described how he utilizes visualisation when the conditions are difficult: "I put on music and think back on positive moments [...] when it has felt good and those times during competition when I have been at the start and [...] had perhaps [...] the best Slopestyle runs of my life. And think back on those situations and try to imagine that this is the same moment [...] it's not hard. I know this [...] you just have to make it through". This coping strategy also utilizes positive thinking, which is utilized by many other riders in this study.

3.2.2 ACT-related coping strategies

Some riders described coping strategies for fear that resemble therapeutic processes within the ACT framework. One participant mentioned sometimes having thoughts about injuring a knee that has previously troubled him: "I try to think about living in the now [---] I try not to get caught up in thoughts about a knee [...]. I have so many other things in my life that are more important than thinking about that I can get injured, that my knee can start locking itself". The coping strategy used to handle these thoughts resembles mindfulness or being in *contact with the present moment*. When asked about what is important in his life he mentioned his family, girlfriend and his everyday life. This is also an example of *committed action* towards ones *values*. Participants' snowboard specific values are described in Figure 6.

Values are closely connected to *committed action* and many riders described motivation behaviours and decision making based on these two concepts. The most cited value relates to having fun when snowboarding, this is often linked to riding with friends and the sense of community it creates. Some values are more relevant as coping strategies for fear than others. Two riders described in detail the value of trying new things. They always aim to try something one time before they make up their mind, if for example a feature looks scary. One of these riders also described how on a competition course with three features to ride on, he chose the most difficult and different one because he values trying new things and expressing his unique way of riding. Three participants expressed that they value personal safety in the way that they want to prevent sustaining injury and how they sometimes make decisions not to ride, or change trick or feature because the risk of injury is too high. One rider explained a feeling of content with the decision of not riding a certain feature during a contest: “In one way I am satisfied with leaving that contest in one piece [...]. A shit result yeah, [...] but at least I am whole”. One rider explained how he values that snowboarding is his profession; he acknowledges that he is privileged because he gets paid to do what he loves and that fear should not get in the way of that.

Code	Category	Theme
Fun (6) Riding and having fun with friends (5) Getting friends stoked on riding (1) Riding and having fun with dad (1) Filming with friends (1)	Fun experiences and the sense of community	Snowboard specific values
Progression (5) Trying new tricks and features (3) Expressing individuality (2) Overcoming fear (2) Competition (2)		
The feeling of riding and landing tricks (5) Adrenaline (4) Freedom (3) Variability (2) Travelling (1) Profession (1)		
Staying uninjured (3)		
	Performance	
	Characteristics of the sport	
	Personal safety	

Figure 6 – Hierarchical structure of “Snowboard specific values” (number of participants reporting code)

After receiving a short explanation of ACT and committed action at the end of the interview one rider pointed out that: “when you make that choice [...] it may not be a good feeling if I do it [...], it feels like then [...] you know what you are doing, because you are doing it [---] You have at least some [...] feeling for what you are about to do, it is not something completely new [---]. You know [...] you can get out of it without injuring yourself”. For committed action to happen the rider must have achieved competence for the task at hand, and must be self-aware of that ability.

Two riders use *defusion* strategies to cope with fear. In a competition situation where an athlete had to ride on a jump with an icy landing, the athlete utilised the human language to cope with it. To *defuse* thoughts of fear due to the snow conditions the athlete thought: “I’m going to stomp this landing, even though it’s icy”. The second part of the sentence acknowledges that there is ice in the landing but the wording of “even though” *defuses* the negative impact and removes the words’ impact on his behaviour. The presence of ice in the landing is seen as a challenge and not a threat. Another rider described how he sometimes had the thought that he could die just before attempting a jump. He then used to say to him self “the worst that could happen is that I die, why does that matter?” The sentence was said as a joke with a comic intonation to disarm the meaning of the words.

Different forms of *acceptance* can be derived from the data. Many riders discussed how it is a virtual given of the sport that you sometimes are expected to ride and perform under changing and less than optimal conditions. Riders have accepted or work on accepting these conditions to cope or deal with fear. One rider said: “When it’s a competition you have to ride. [...] It is what it is [...], you have to ride it, make the best of it”. Another rider described accepting the risk of injury in a wider perspective: “It can happen anytime. It can happen when you are out training and the conditions are perfect [...]. You catch your edge or come in wrong. [...] It can happen anytime, you have to think a bit like that really”. Injuries in general were also described as part of the sport. Their prevalence has made one rider completely accept them and as a result is not agonized about them: “I am not afraid of getting injured [...]. I mean it’s a part of [...] riding and your progression. You have to injure yourself sometimes [...] you can’t go through a career uninjured and learn new tricks. There will be some kind of injury and you just have to accept it”. As a part of acceptance work in situations of less than optimal

conditions, riders also described how they adjust their riding to either their own ability or the current conditions.

4 Discussion

This study aimed to increase understanding of how elite freestyle snowboarders experience and cope with fear and to examine these concepts through the lens of ACT. To obtain as rich data as possible from the participants, a broad perspective on fear was used. However, it was the researcher's original idea to investigate fear of injury, rather than "fear of failure". After receiving instructions to disregard competitive state anxiety or feelings of fear of failure, almost all answers were related to fear of injury due to the inherent high-risk associated with the sport of elite freestyle snowboarding. The fear described by the riders in this study is a complex emotion that is sometimes interpreted as a negative experience and sometimes positively. The riders have developed both acute and long-term strategies for coping with fear. The strategies used can be consistent with traditional cognitive control or avoidance perspective, but also consist from a psychological flexibility perspective as advocated by ACT. It is evident from this study that the concept of fear cannot be researched in an elite freestyle snowboard environment without also including the element of risk. Risk effects fear and fear can sometimes be seen as a functional response to risk.

4.1 Theoretical implications and practical applications

All participants in this study have sometime during their career experienced fear while snowboarding. The source of this fear can be linked to the high-risks involved with the sport in terms of prospect for sustaining significant personal injury. However the interpretation of fear as an emotion differs between individuals and within individuals in different situations. Some situations are for example more likely to invoke fear, such as when performing a trick you have previously crashed on, which is an experience shared by elite teamgym athletes (De Pero, Mingati, Pesce, Capranica, & Piacentini, 2013). It is however important to note that the data in the current study provides examples of exceptions where previous crashes have not affected future behaviour or even future negative feelings. This may be due to a rider having effective coping strategies or that the crash simply produced no negative effect on the rider. In summary, fear is both situational and individualised.

4.1.1 Interpretation of fear

The result of the participants' at times negative interpretation of fear is illustrated through the pathological processes in ACT; one commonly cited response was *experiential avoidance*. Harris (2009, p 23) explains that these responses are generated because of people's great capacity of problem solving. A problem is something unwanted; the solution is to get rid of it. In a physical world this concept works really well: if it rains, take shelter or use an umbrella. However in an individual's inner world of thoughts and emotions, avoiding is less successful (Harris, 2009, p 24). Avoiding experiences that invoke unpleasant thoughts or emotions will in most cases lead to more suffering. Suppression of unwanted thoughts can lead to an increase in both intensity and frequency of the very same thoughts (Wenzlaff & Wegner, 2000). Mood suppression has been shown in some instances to create a self-amplifying loop that intensifies the unwanted mood (Feldner, Zvolensky, Eifert, & Spira, 2003; Wegner, Erber, & Zanakos, 1993). Another way of viewing this is that in a snowboarder's situation the actual interpretation of fear as negative can create a fear for the emotion of fear itself; the fear for the emotion results in experiential avoidance. This leads to more negative emotions that need to be dealt with, creating a negative spiral of emotions impairing performance and well-being. The negative interpretation of fear is a part of *cognitive fusion*. Although no rider in this study expressed this viewpoint it is possible that they are affected by these mechanisms. If a snowboarder wants to progress in his/her sport, progress the sport itself or just enjoy performing the sport with friends or teammates, the athlete may run into situations that are fear-provoking. Avoiding those situations by not attempting a trick or a feature and perhaps avoiding the thoughts and emotions of fear, will not help that individual reach his/her goal or do what he/she considers really important. *Experiential avoidance* is a non-functional response in all these situations.

It must be emphasized, however, that the emotion of fear is not always interpreted among the participants as something bad. Several riders say that a little bit of fear increases performance and that it is healthy when linked to risk assessment. The view of fear as something that keeps you alive is shared with the extreme athletes in the study by Brymer & Schweitzer (2013). The participants with this view describe how fear and risk have a close relationship, similar to a positive correlation where as the risks increase so does fear, and where fear is seen almost as a symptom of high risk. A contrasting view was expressed by two participants who define and view fear and risk as totally separate concepts, without any relation to each other. In their

perspective, fear only appears to be a hindrance for performance and doubts about the riders own capability, whereas risk management is something carried out without the influence of fearful emotions. Another difference in the meaning of the word “fear” is seen in how the participants interpret a slight physical arousal before a performance. Some call that a small dose of fear where others don’t use that word for what appears to be the same experience. In practical applications, coaches should be aware that there are different perspectives of what fear is. To avoid misunderstandings, it is important that coaches are open to athletes’ different perspectives and take an individualised approach where high risk and/or fear is involved.

Another factor that seems to influence the participants’ appraisal of fear is the continuum in magnitude of emotion, which is described by several participants. This fear continuum can be compared to and is probably related to a continuum of physical arousal where athletes have an optimal level where they can perform at their best (Oxendine & Temple, 1970; Miesel & Potgieter, 2003). The fear continuum seems to only be relevant when it comes to physiological responses of fear, as all cognitive changes of fear are deemed negative for performance.

The extent to which fear constitutes a problem to the participants varies across individuals, but a majority do not consider it a problem. It is not clear whether this is due to functional coping strategies, the amount of experienced fear or how the emotion of fear in itself is appraised in terms of good or bad. It is likely an individual mixture of all three factors. It can be concluded that fear can impact both performance and well being; skills to deal with these emotions are necessary for snowboarders to be able to progress and develop a true passion for the sport, and ultimately to prevent drop out.

4.1.2 Non-ACT-related strategies

A majority of the identified coping strategies for fear among the participants are not related to ACT. This is not surprising as the utilization of ACT in sport psychology is relatively new and the participants had no training in ACT. The participants that had any training in coping strategies in sport had all received this with a cognitive control perspective, more in line with traditional sport psychology. Many of the coping strategies not related to ACT are in line with findings of previous research on fear. Strategies such as self-talk, thought stopping, relaxation, visualisation and focus on technical aspects of the sport are described in the

published literature (Miesel & Potgiter, 2003; Brymer & Schweitzer, 2013; Chase et al., 2005). Also, physical preparation strategies to overcome fear, such as practicing basic tricks and the importance of coach communication as social support, are referred to in previous research (Chase et al., 2005). A majority of the coping strategies not related to ACT could be described as having the same function as the pathological process of *experiential avoidance* in ACT. Avoiding strategies operate by physically avoiding situations that generate emotions of fear. Cognitive distraction strategies and cognitive control strategies function as cognitive experiential avoidance. The athlete tries to avoid thoughts of fear by thinking of something specific or just something other than what is causing the emotions of fear. It is interesting to note that one participant in the current study points out the problem with cognitive control strategies, as his experience is that nervousness or fear before competition is difficult or impossible to control.

It is worth pointing out that some coping strategies that are not related to ACT are not necessarily bad strategies or antagonists to ACT. Strategies such as practice basic tricks, progress slowly, training on tricks in safe venues and social support have nothing or very little to do with ACT, but can be considered functional strategies to cope with fear. ACT strategies alone may in fact not be sufficient or desirable in an elite freestyle snowboard environment. This also show how ACT strategies and strategies not related to ACT can complement each other as well as work independently simultaneously without interfering. There are also ACT strategies and strategies not related to ACT that are closely connected. An example of this is the concept of social support and the value of having fun while riding with friends, which are thoroughly interconnected and can almost be considered two ways of viewing the same idea. The social support riders' get from their friends is what strongly contributes to them regarding the activity as fun.

4.1.3 Acceptance and Defusion

In spite of not having any training in ACT, it is noteworthy that some riders have found a way to relate and cope with fear that resembles and functions as ACT. An example of this is the two identified *defusion* strategies that bear much resemblance to strategies described in Harris (2009, p. 111) and Livheim (2012). One of the most reported ACT strategies for fear in this study is *acceptance*, which is in line with research on athletes in extreme sports by Brymer & Schweitzer (2013). The participants in the current study describe injuries or injury risk almost

as a natural part of the sport. They seem to be aware of the risk of injury, but have found a way to relate to these facts so they can still function and perform. The participants have made the decision that participation in their sport is worth it, despite the risks. When choosing to engage in a sport at a higher level, it is likely one has accepted the nature and demands of the sport (De Pero et al., 2013; Cartoni, Mingato, & Zelli, 2005). Another possibility is that the risks associated with the sport and the attendant fear, actually adds to the attraction of the sport itself. Participants describe both the value of overcoming fear and the value of landing tricks (which both entail conquering risks), which can be interpreted as though the risks themselves are somewhat desirable (Brymer & Schweitzer, 2013). It is worth noting however, that even though most of the participants have accepted the risk of injury, a majority of them still experience fear, which is similar to the experiences illustrated by the participants in Brymer & Schweitzer (2013). This is an indicator of some participants having an ACT perspective when relating to fear, acceptance does not remove feelings of fear; but rather facilitates taking action towards what is important.

Certain strategies have been interpreted as consistent with both *experiential avoidance* (not related to ACT) and as *acceptance*, depending on the motivation for the action. Changing tricks or changing direction of trick was designated here as experiential avoidance. Adjusting their riding to their own ability or current conditions is essentially very similar, but was interpreted as acceptance as it was more attuned to the particular demands of the existing situation. Considering the multiple interpretations of a given strategy, it can be implied that different individuals may use them in different ways but also that a single individual can utilize the strategy in both ways. It is therefore very important when working with athletes on coping strategies for fear with an ACT perspective, to be clear of the reasons and functions of the strategy to gain the appropriate effect.

It is interesting to note that a majority of the riders feel more fear during training than in competition. This could be due to a higher utilisation of *acceptance* during competition; one of the riders explained how he perceives that he doesn't have a choice in terms of riding or not riding in competition, so he just accepts the situation and goes through with the performance. The fact that participants are willing to take higher risks during competitions than in training in terms of riding on features and in conditions that they would not normally ride in, can also be a sign of acceptance of the specific situation of competition. However lower levels of fear in competition could also be due to participants only performing tricks

they feel comfortable with in that situation. It is also possible that participants feel less fear in competition because the contest organizers have a great impact on the risk assessment. In training the risk assessment is almost entirely in the hands of the rider, whereas in a competition the organizers have a responsibility to provide a safe arena to compete in. Several participants also describe how their coach helps with risk assessment in a competition setting, which has a fear reducing effect.

4.1.4 Committed action and Values

Committed actions towards *values* are other ACT strategies used by the snowboarders in this study, and by participants in the study by Brymer & Schweitzer (2013). The sense of mastery, described by participants in Brymer & Schweitzer (2013) is similar to the value of progression and trying new tricks and features cited by the participants in this study. Athletes in the study by Miesel & Potgiter (2003) expressed the need for stimulation, change and creativity which correspond to what participants in this study deem important: variability, progression, expressing individuality and trying new tricks and features. In the current study the value of trying new tricks and features is described in a way that points strongly towards an ACT perspective. Always trying a feature before making up your mind or choosing features that are a bit different is described as how they snowboard, or as their own rules of conduct. However if an athlete *fuses* with his/her *values* it can lead to *attachment to the conceptualized* self where the values become strict, non-functional rules, a view very close to what is described by one rider. This situation points out how very close components in the two different hexaflexes are and how values must be held lightly so they do not function as obstacles instead of facilitators.

When studying the various *values* described by the participants one can observe that certain values may have practical applications in certain situations. The value of variability for instance could possibly be very useful in situations where snow and weather conditions are less than optimal which are cited sources of fear in this study. Reminding oneself of this value may assist in acceptance and performance in these types of situations. The value of progression is most likely useful in the same type of situation.

Although only three riders explicitly expressed that they *value* personal safety and preventing injury, a majority of the riders expressed the importance of risk assessment. From an ACT

perspective, valuing both personal safety and progression can be considered as having conflicting values. Having conflicting values makes the process of taking *committed action* towards both of them more difficult or impossible. It is possible that values can be ranked in terms of importance, but it is extremely likely that this ranking is not set and may change depending on the situation. This can create situations where difficult decisions have to be made under the influence of strong emotions.

Specific skills and self-knowledge about these skills are required to take *committed action* towards some *values* e.g. progression, as there is a significant risk for injury in the environment where elite freestyle snowboarders work; one rider also pointed out this fact at the end of the interview after receiving an explanation of committed action. The rider needs the competence to ride on the feature or to perform the trick. Riders without these necessary skills are likely to feel fear before attempting the trick or feature; but it would not be a functional strategy to use committed action towards a value of progression in that scenario. This also points out that the element of risk can never be removed from the analysis of fear in elite freestyle snowboarding.

4.1.5 Peer influence

Fellow riders strongly influence the participants in this study, both positively and negatively. The positive influence from friends is cited as an important value in a majority of the riders. The community of friends seems to have the ability to create environments that can facilitate progression and the overcoming of fear. This is generated both verbally through vocal encouragement and visually by seeing others succeed. The human relationships in the community also appear to inspire riders not only to progress themselves, but also to inspire others and help them progress. This concept is likely strongly related to the participants' appraisal of the activity as "fun", which is another value cited by a majority of the riders. However, if the atmosphere in the community is negative it can affect the involved riders negatively. Participants claim to base their opinion about a feature on their own experience, but seeing other riders crashing on a feature that looks scary can make a rider doubt his/her own ability and increase fear, which confirms findings on previous research (Fulham O'Neill, 2008). The effect of such a situation can also be dependent on the skill level of the rider that crashes, indicating how the community can affect a participants' *attachment to the conceptualised self*. Fulham O'Neill (2008) however, found no support for the hypothesis that

traumatic season ending injuries sustained by more accomplished athletes will have a greater affect on teammates fear than average team athletes.

4.2 Limitations of the study and theoretical framework

As for most theoretical frameworks, there are some limitations. Originally ACT was developed for usage in clinical environments and researched in clinical studies; it is not until lately it has been applied in research with other populations. ACT was also developed as a behavioural therapy, which is perhaps more suitable for an intervention study than a descriptive one. The complex relationships among the ACT processes makes it difficult to indentify which processes the participants utilize in fearful situations. There is to this day no research that can isolate the different processes in the ACT hexaflex and explain how the processes function together, which is also a limitation of the theoretical framework (Levin, Hildebrandt, Lillis, & Hayes, 2012).

Some strategies that have been interpreted as not related to ACT could potentially be categorized as ACT processes. Riders who say they utilize listening to music as a coping strategy for fear, could employ it as a mindfulness strategy; staying *present in the moment* by directing their focus on the music. Looking and focusing on the view was another described coping strategy that could be a form of being present in the moment. However since none of the participants had received any training in ACT is deemed that both strategies are utilized as distraction more than as a mindfulness tool. It is also possible that some strategies that have been interpreted as avoidance of fear may be *committed actions* towards *values*. Since many riders value having fun, changing tricks from one that the rider does not have a “good feeling” about to something else may be a committed action towards having fun.

The possibility exists that strategies identified as ACT in this study may not be utilized as such. The identified values may only work as motivation for sports participation instead of conscious strategies for coping with fear. The participants’ lack of understanding for the ACT processes due lack of experience in therapeutic techniques, together with a research design where the participants were not informed of the theoretical framework until after the interview, are two explanations for the difficulties in determining which and how processes are utilized. The research design can be justified with the argument that it prevents social desirability. Had the participants been informed before the interview that the aim was to

examine psychological flexibility they may have answered differently to give a “correct” answer. It is possible that if the interviewer asked more follow up questions at some points during the interviews, more in-depth data and understanding of the participants’ utilization of the strategies could have been obtained. This may be attributed to the researchers limited previous experience in interview technique and qualitative research, however this was somewhat compensated for by the six pilot interviews which improved both the interview guide as well as the interview skills of the researcher.

A theoretical limitation of utilizing ACT as a framework for this study is that it does not consider the concept of risk management, which as described sometimes is a relevant factor for elite freestyle snowboarders in fearful situations. Coping strategies for fear are functional in the way that they can help riders’ progression and performance, but may be non-functional if they impact on or remove risk management, which is essential to ensure personal health. Rational fear must be separated from irrational fear (Fiegley, 1990). A comparison can be made with other areas where ACT has previously been applied, such as social anxiety where a client may avoid social gatherings in an attempt to control negative emotions (Harris, 2006). The action of attending a social gathering may be a very uncomfortable experience, but it does not pose any risk to a person’s physical safety, as consistent with the situation of the snowboarders in this study.

4.3 Validity and reliability

Discussions of reliability and validity in qualitative research often appear fluid: different perspectives on these questions are held in the research community. Culver, Gilbert and Trudel (2003) and Culver, Gilbert and Sparkes (2012) reviewed the qualitative research articles published in three sport psychology journals during the previous 20 years. The four most utilized ways to ensure and report trustworthiness in the research was data collection instrument, peer review, reliability check and member checking.

In a study using interviews as a data collection method, the researcher is the data collection instrument. According to Culver et al. (2003) and Culver et al. (2012) it is important to report a researchers bias, training and context. In the sample used in this study four participants had participated in a previous study of the researcher and another participant had worked briefly in the same workplace as the researcher. However it is deemed that this bias had very limited

impact on the outcome of the results. To familiarise herself with the theoretical framework the author, besides reading literature, attended a 12-hour ACT workshop held by the supervisor of this thesis and a conference where professor Frank W. Bond lectured about how he utilised ACT in his work with Olympic athletes. Attending both these ACT events increased the researcher's understanding of ACT. This increased understanding aided the ability to ask follow-up questions during the interview to gain the necessary information to determine the presence of ACT in participants' coping strategies, and to categorize coping strategies as either ACT related or not during the analysis process. As previously reported the researcher trained her interview skills during numerous pilot interviews, where both audio and visual feedback helped critical reflection and skill improvement. The present researcher also has experience as a rider, instructor, coach and quantitative researcher in snowboarding.

Due to the restrictions in both time and resources allocated to this research project, peer-review was only used in the construction of the interview guide and to a limited extent during the analysis stage. The lack of peer review in the interpretation of the results may be seen as a considerable limitation of this study. Reliability checks between the result analyses of two or more researchers were not available. Member checking was utilised in this study as noted but limited to verification of interview transcripts. No participants commented on the transcripts, however it is not known if this is due to everyone agreeing with the content of the transcripts or if some did not read them at all.

Closely related to the concept of validity is the concept of generalisability. The sample in this study is relatively small and heterogeneous in terms of age, skill, experience and injury history; the spread in results can be derived from these facts. It can also be argued that this gives great diversity in the data, however it may limit the generalisability of the results to a larger population.

To present the results in this study, several quotes are used to illustrate the interpretations and concepts. The interviews were conducted in Swedish, so the quotes have been translated into English. Whenever translating words from one language to another there is a risk of losing the actual meaning of the words. Had the interviews been conducted in English, participants may not have been able to give as rich informative data as it is not their first language. On the other hand, had this paper been written in Swedish the potential readership would have been more limited.

4.4 Conclusions and recommendations for future research

Fear is something that elite riders have to conquer to succeed in freestyle snowboarding. Finding ways to handle fear is essential to enable development of true passion for the sport as well as progressing skills and performance. Failing to cope with fear can prevent the enjoyment of riding, as well as result in lowered performance, ill being and ultimately potential dropout from the sport. From an ACT perspective, the interpretation of fear as something negative is one of the primary issues to tackle, as it is this interpretation that often leads to experiential avoidance and other unworkable actions. This fear of the emotion of fear can create a negative spiral of emotions and behaviours that do not lead in the direction of what the person values in life or his/her sport.

This paper adds to our knowledge of fear in elite freestyle snowboarders as well as ACT as a theoretical perspective in the same context. The findings also determine that fear in elite freestyle snowboarding cannot be studied without also considering the high risk involved in the activity. A majority of the riders in this study experience fear while snowboarding, but do not consider it a problem. The present findings offer some support for the suggestion that ACT strategies can be useful in coaching, and as a perspective individuals can apply to cope with their own fearful thoughts and motions. The complexities of the ACT framework are displayed in the difficulties in categorizing processes and strategies.

There are many possible directions for future research on fear in a high-risk sport context. A potential research topic would be to compare the efficiency of cognitive control strategies versus ACT strategies for fear, or an ACT intervention study targeting individuals who utilize experiential avoidance to a great extent. It would also be interesting to quantitatively further examine the extent of ACT strategies versus cognitive control strategies utilized by elite freestyle snowboarders. The relationship between fear and risk management is another possible research topic. To further research the relationship between the fear-related characteristics of elite freestyle snowboarders and performance, a longitudinal study is suggested where the research question could be: are low levels of fear, positive appraisal of fear or good coping strategies for fear linked to success in elite freestyle snowboarding? This could help answer the question: is fear not a problem because they are good riders or are they good riders because fear not a problem?

References

- Ardern, C. L., Taylor, N. F., Feller, J. A., & Webster, K. E. (2012). Fear of re-injury in people who have returned to sport following anterior cruciate ligament reconstruction surgery. *Journal of Science and Medicine in Sport, 15*(6), pp 488-496
- Bernier, M., Thienot, E., Codron, M., & Fournier, J. F. (2009). Mindfulness and acceptance approaches in sport performance. *Journal of Clinical Sport Psychology, 4*, pp. 320-333.
- Bjordal, J. M., Arnoy, F., Hannestad, B. Strand, T. (1997). Epidemiology of anterior cruciate ligament injuries in soccer. *American Journal of Sports Medicine, 25*(3). Pp. 341-345
- Brymer, E., & Schweitzer, R. (2013). Extreme sports are good for your health: A phenomenological understanding of fear and anxiety in extreme sports. *Journal of Health Psychology, 18* (4), pp. 477-487.
- Cartoni, A. C., Mingato, C., & Zelli, A. (2005). Gender, age, and professional-Level differences in the psychological correlates of fear of injury in Italian gymnasts. *Journal of Sport Behaviour, 28*(1). pp 3-17.
- Chase, M. A., Magyar, T. M., & Drake, B. M. (2005). Fear of injury in gymnastics: Self-efficacy and psychological strategies to keep on tumbling. *Journal of Sport Sciences, 23* (5), pp. 465-475.
- Culver, D. M., Gilbert, W. D., & Trudel, P. (2003). A decade of qualitative research in sport psychology journals: 1990-1999. *The Sport Psychologist, 17*, pp. 1-15.
- Culver, D. M., Gilbert, W., & Sparkes, A. (2012). Qualitative research in sport psychology journals: The next decade 2000-2009 and beyond. *The Sport Psychologist, 26*, pp. 261-281.
- Dahl, J., Wilson, K. G., & Nilsson, A. (2004). Acceptance and commitment therapy and the treatment of persons at risk for long-term disability resulting stress and pain symptoms: A preliminary randomized trial. *Behavior Therapy, 35*, pp. 785-802.
- De Pero, R., Mingati, C., Pesce, C., Capranica, L., & Piacentini, M. F. (2013). The relationships between pre-competition anxiety, self-efficacy, and fear of injury in elite teamgym athletes. *Kinesiology, 45* (1). pp. 63-72.
- De Petrillo, L. A., Kaufman, K. A., Glass, C. R., & Arnkoff, D. B. (2009). Mindfulness for long-distance runners: An open trial using Mindful Sport Performance Enhancement (MSPE). *Journal of Clinical Sport Psychology, 4*, pp. 357-376.
- ESPN. (n.d.). <http://xgames.espn.go.com/>. Retrieved 2013 19-August from X-Games: <http://xgames.espn.go.com/skiing/article/7466421/sarah-burke-dies-injuries-suffered-utah>

- Feldner, M., Zvolensky, M., Eifert, G., & Spira, A. (2003). Emotional avoidance: An experimental test of individual differences and response suppression using biological challenge. *Behavioural Research and Therapy*, 41(4), pp. 403-411
- Fiegley, D. A. (1990). Fear intervention in high risk sports. *Journal of Sport & Exercise Psychology*, 12 (3), pp. 211-212.
- Frijda, N. H. (1999). Emotions and Hedonic Experience. In D. Kahneman, E. Diener, & N. Schwarz, *Well-Being: The Foundations of Hedonic Psychology* (pp. 190-210). New York: Russell Sage Foundation.
- Fulham O'Neill, D. (2008). Injury Contagion in Alpine Ski Racing: The Effect of Injury on Teammates' Performance. *Journal of Clinical Sport Psychology*, 2. pp. 278-292
- García, R. F., Villa, R. S., & Cepeda, N. T. (2004). Effect of hypnosis and Acceptance and Commitment Therapy (ACT) on physical performance in canoeists. *International Journal of Clinical and Health Psychology*, 4(3), pp. 481-493.
- Gratton, C., & Jones, I. (2010). *Research methods for sports studies*. New York: Routledge.
- Harris, R. (2006). Embracing your demons: an overview of Acceptance and Commitment Therapy. *Psychotherapy in Australia*, 12 (4), pp. 2-8.
- Harris, R. (2009). *ACT made simple: An Easy-to-Read primer on Acceptance and Commitment Therapy*. Oakland: New Harbinger Publications Inc.
- Hassmén, N., & Hassmen, P. (2008). *Idrottsvetenskapliga forskningsmetoder*. Stockholm: SISU Idrottsböcker.
- Kaufman, K. A., Glass, C. R., & Arnkoff, D. B. (2009). Evaluation of Mindful Sports Performance Enhancement (MSPE): A new approach to promote flow in athletes. *Journal of Clinical Sports Psychology*, 4, pp. 334-356.
- Kvist, J., Ek, A., Sporrstedt, K., & Good, L. (2005). Fear of re-injury: A hindrance for returning to sport after anterior cruciate ligament reconstruction. *Knee Surgery, Sports Traumatology, Arthroscopy*, 13(5), pp 393-398.
- Lantz, A. (2007). *Intervjumetodik*. Lund: Studentlitteratur.
- Lazarus, R. S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist*, 14, pp. 229-252.
- Livheim, F. (2012). PowerPoint presentation for second seminar in the course: *ACT- Att hantera stress och främja hälsa*.
- Levin, M. E., Hildebrandt, M. J., Lillis, J., & Hayes, S. C. (2012). The impact of treatment components suggested by the psychological flexibility model: A meta-analysis of laboratory-based component studies. *Behaviour Therapy*, 43, pp. 741-756.

- Miesel, M. E., & Potgieter, J. R. (2003). The experience of fear in high-risk sport. *South African Journal for Research in Sport, Physical Education and Recreation*, 25 (2), pp. 49-56.
- Oxendine, J. B., & Temple, U. (1970). Emotional arousal and motor performance. *Quest Monograph*, 13, pp. 22-23.
- Ruiz, F. J., & Luciano, C. (2009). Eficacia de la terapia de aceptación y compromiso (ACT) en la mejora del rendimiento ajedrecístico de jóvenes promesas [Acceptance and commitment therapy (ACT) and improving chess performance in promising young chess-players]. *Psicothema*, 21, pp. 347-352.
- Schwanhausser, L. (2009). Application of the Mindfulness-Acceptance-Commitment (MAC) protocol with an adolescent springboard diver. *Journal of Clinical Sport Psychology*, 4, pp. 377-395.
- Seino, H., Kawaguchi, S., Sekine, M., Murakami, T., & Yamashita, T. (2001). Traumatic paraplegia in snowboarders. *Spine*, 26 (11), pp. 1294-1297.
- Torjussen, J., & Bahr, R. (2005). Injuries among competitive snowboarders at the national elite level. *The American Journal of Sports Medicine*, 33 (3), pp. 370-377.
- Torjussen, J., & Bahr, R. (2006). Injuries among elite snowboarders (FIS Snowboard World Cup). *British Journal of Sports Medicine*, 40, pp. 230-234.
- Trost, J. (2005). *Kvalitativa intervjuer*. Lund: Studentlitteratur.
- Twohig, M. P., & Hayes, S. C. (2006). Increasing willingness to experience obsessions: Acceptance and Commitment Therapy as a treatment for obsessive compulsive disorder. *Behavior Therapy*, 37 (1), pp. 3-13.
- Wegner, D. M., Erber, R., & Zanakos, S. (1993). Ironic processes in the mental control of mood and mood-related thought. *Journal of Personality & Social Psychology*, 65(6), pp. 1093-1104
- Wenzlaff, R. M., & Wegner, D. M. (2000). Thought suppression. *Annual Review of Psychology*, 51, pp. 59-91
- Wolanin, A. T., & Schwanhausser, L. A. (2010). Psychological functioning as a moderator of the MAC approach to performance enhancement. *Journal of Clinical Sport Psychology*, 4, pp. 312-322.
- Zettle, R. D., & Raines, J. C. (1989). Group cognitive and contextual therapies in treatment of depression. *Journal of Clinical Psychology*, 45, pp. 438-445.

Appendix A - Source- and Literature Search

Aims and objectives: The aim of this study is to explore how elite snowboarders experience and deal with thoughts and emotions of fear in conjunction with performing their sport. Research objectives:

- How do the athletes experience fear?
- How do the athletes cope with fear?
- Are any of the coping strategies related to the therapeutic processes in the Acceptance and Commitment Therapy (ACT) Hexaflex (Harris, 2009, p. 10)?

Which search words did you use?

Acceptance and Commitment Therapy, Sport, Snowboarding, High-risk, Risk, Fear, Elite, MAC, Psychology, ACT, Performance, Injury

Where did you search?

SportDiscus, PubMed

Which searches gave relevant results?

SportDiscus: Sport*+ fear + Risk, Sport* +fear+ elite, Sport*+ Acceptance and commitment theory, Sport*+ MAC
PubMed: Sport*+ fear+ risk, Snowboard+injury

Comments

I found a few articles in reference lists and also got some article suggestions from my supervisor.

Appendix B – Participant Information Letter



Deltagare sökes till intervjustudie om hur snowboardåkare upplever och hanterar rädsla

Jag heter Alette Vestly och är student på Mastersprogrammet i idrottsvetenskap vid Gymnastik- och idrottshögskolan (GIH) i Stockholm. I vår ska jag skriva min Mastersuppsats inom idrottspsykologi där jag är intresserad av hur snowboardåkare upplever och hanterar rädsla.Handledare är Göran Kenttä, Lektor i idrott inriktning idrottspsykologi vid GIH.

Bakgrund

Parkdisciplinerna Big air, Slopestyle och Halfpipe inom snowboard har haft en stark utveckling de senaste åren då storleken och svårighetsgraden på features och tricks ökat explosionsartat. Detta har även gjort att risken för allvarliga skador har ökat och åkare troligen måste hantera tankar och känslor av rädsla i större utsträckning. Rädsla kan fungera som en funktionell spärr för att förhindra att en åkare åker över sin förmåga men kan även verka dysfunktionellt genom att hindra utvecklingen. Syftet med den här studien är att undersöka hur elitåkare inom parkdisciplinerna i snowboard definierar rädsla samt hur det hanterar tankar och känslor om detta ämne. Genom att utforska detta område kan vi utöka kunskapen om hur elitåkare hanterar rädsla samt använda den informationen för att hjälpa yngre förmågor tidigare i sin utveckling att hitta strategier som fungerar för att hantera dessa tankar och känslor.

Deltagarna som sökes till denna studie är snowboardåkare cirka 20 år eller äldre som tävlar internationellt i Big air, Slopestyle eller Halfpipe. Intervjuerna kommer genomföras under mars och eventuellt april månad.

Genomförande och rättigheter

Medverkan i studien är helt frivilligt och du har rätt att avbryta intervjun när som helst utan att ange skäl. Intervjuerna kommer att spelas in för att underlätta analys. Deltagande är anonymt och allt material som samlas in under studien kommer att behandlas på ett sätt som, av utomstående, inte kan kopplas till dig som person. Detta innebär att bara jag, som forskare, kommer kunna se vad just du svarat eller berättat. Du kommer som deltagare ha möjlighet att läsa utskrifterna av intervjun och förtydliga svar om du önskar. Ljudfilerna och transkriberingarna av intervjuerna kommer att förvaras på ett säkert sätt. Resultaten av studien kommer att presenteras så att det inte går att identifiera enskilda personer. Innan intervjun börjar kommer du ge skriftligt informerat samtycke att delta i studien.

Om du har frågor om projektet eller vill vara med är du välkommen att kontakta mig eller min handledare.

Alette Vestly
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072-337 49 25

Göran Kenttä
goran.kentta@gih.se
08-120 537 32

Appendix C – Written Informed Consent Form



Skriftligt informerat samtycke till deltagande i studie om hur snowboardåkare upplever och hanterar rädsla

- Jag har läst informationsbladet ” Deltagare sökes till intervjustudie om hur snowboardåkareupplever och hanterar rädsla”.
- Jag har fått information om projektet och haft möjligheter att få svar på mina frågor.
- Jag förstår vad syftet är med studien och vad det innebär att delta i studien.
- Jag vill delta i studien.

(Ort)_____ (Datum)_____

(Namnförtydligande)_____

(Underskrift)_____

Appendix D – Interview Guide

Innan vi börjar intervjun vill jag bara påminna om att det inte finns något rätt eller fel svar, du får svara precis hur du vill. Det kan hända att du vill svara likadant på flera frågor och det är också ok. Om du inte vill svara på någon fråga kan vi hoppa över den. Är det en fråga du inte förstår är det bara att säga till så ska jag försöka förtydliga eller ge exempel. Jag kanske gör lite anteckningar under intervjun för att påminna mig om saker du säger som jag kanske vill ta upp vid en senare fråga.

Bakgrund

- Hur gammal är du?
- Hur länge har du åkt snowboard?
- För att beskriva nivån på din åkning:
 - Kan du berätta om hur stora features du kör på?
 - Vilka är dina tricks med högst svårighetsgrad?
 - Vilken typ av tävlingar kör du? På vilken nivå?

Den här intervjun ska handla om rädsla i samband med snowboardåkning. När vi talar om rädsla vill jag att du ska bortse från rädsla eller oro för att misslyckas rent resultatmässigt på t.ex. en tävling. Jag kommer först fråga några öppna allmänna frågor.

1. Kan du minnas en specifik gång när du kände rädsla när du åkte snowboard?

- Vad hände
- fysiskt i kroppen?
 - psykiskt med tankar och känslor?
 - med prestation?
 - med riskbedömningen?

2. Har den här episoden påverkat dig senare?

Om ja: Hur då?

Om Nej: Har du aktivt jobbat för att den inte ska göra det? Hur?

3. Vad utlöser rädsla hos dig?

Vad är det du är rädd för? (*smärta, skada, att vara borta från åkning*)

Hur brukar du hantera det när du stöter på det?

Har du hanterat det på något annat sätt också?

4. Hur påverkar andra åkare din rädsla?

Märker du ibland av att andra åkare är rädda?

Hur märker du av det?

Påverkar det dig på något sätt?

Hur hanterar du det?

5. Finns det andra personer som påverkar din rädsla? (Exempelvis: Tränare, föräldrar)

Hur påverkas du av dem?

Hur hanterar du det?

6. Hur påverkar rädsla din prestation?

Vad händer? Vad gör du?

Hur kommer det sig att du inte påverkas av rädslan?

7. Vad händer med rädslan när du kraschar riktigt hårt?

Hur påverkar det dig när du åker igen?

Hur hanterar du det?

Tänker du någonsin att det skulle kunna hända dig igen?

Hur hanterar du de tankarna?

Hur påverkas rädslan om du skadar dig i en krasch?

8. Vad händer med din rädsla när du ser någon annan åkare krascha?

Hur påverkar det dig när du åker?

Hur hanterar det?

Tänker du någonsin att det skulle kunna hända dig?

Hur hanterar du de tankarna?

Är det någon skillnad om du känner åkaren eller inte?

9. Har du någon gång försökt hantera rädslan men misslyckats med att hantera de tankarna eller känslorna?

Vad hände då, beskriv?

Nu kommer jag fråga lite mer specifika frågor om hur du hanterar rädsla.

10. Har du någon gång fastnat i tankar som handlar om rädsla?

Vilka tankar var det du fastnade i?

Hur länge var du ”fast” i dem?

Hur gjorde du för att ta dig ur det tankemönstret?

11. När du känt rädsla, har det hänt att du planerat att köra på en feature och sen ändrar dig för ett annat eller avstått från att åka?

Om ja: Kan du beskriva händelsen och varför du ändrade dig?

Avstod du för att undvika rädslan och obehaget eller för de potentiella konsekvenserna av ett misslyckat åk?

12. Hur gör du för att hitta rätt tillstånd/fokus precis innan du ska köra?

Har du använt samma strategi för att hitta fokus igen om du blivit distraherad av eller upptagen av tankar och känslor av rädsla?

Om ja: Fungerade det?

Om nej: Tror du det skulle fungera?

13. Har det hänt att du helt tappat fokus precis innan du ska köra?

Om ja: Vad hände då?

Hur gjorde du för att hitta fokuseringen igen?

Har du använt samma strategi för att hantera rädsla?

Om ja: Fungerade det?

Om nej: Tror du det skulle fungera?

Om nej: Har det hänt att du varit nära att tappa fokus precis innan du ska köra men lyckats hantera det?

Hur gjorde du då?

14. Har du en beskrivning av dig själv som hindrar eller hjälper dig att hantera rädsla?
(Exempelvis: ”Jag är världens bästa snowboardåkare jag kraschar aldrig”)

15. Vad är det som gör att du fortsätter åka trots att du upplever dessa känslor av rädsla?

16. Vad är skillnaden mellan att avstå ett åk pga. av att vara rädd och att göra en giltig riskbedömning?

17. Är det skillnad på träning och tävling i din upplevelse av rädsla?

Vad är skillnaden?

18. Är det skillnad på hur du hanterar rädsla på träning och tävling?

Vad är skillnaden?

19. Är din upplevelse av rädsla annorlunda om du filmar för en snowboardfilm?

Hur skiljer det sig?

Hanterar du det annorlunda då?

Hur skiljer det sig?

20. Är rädsla ett stort eller litet problem för dig?

Vill du utveckla det lite?

Kan rädsla vara positivt i någon situation?

21. Är det något vi glömt ta upp eller något du vill tillägga?

22. För att tolka svaren i den här studien kommer jag använda mig av en teori som heter Acceptance and Commitment Therapy (ACT) som enkelt beskrivet går ut på att man antingen accepterar att vissa saker är obehagliga och utsätter sig för dem ändå eller undviker det. Har du någon kommentar eller reflektion på det i relation till vad vi talat den senaste timmen?

Appendix E – Snowboarding Dictionary

Backside rotation A regular rider rotates clockwise and a goofy rider rotates counter clockwise

Box A box made of wood with metal edges and a plastic sheet on top that is used to perform sliding tricks on

Catching an edge When the edge of the snowboard digs down into the snow and gets stuck, resulting in a the rider crashing

Cork Inverted spin

Feature Object used to perform a trick on

Direction of trick Direction of rotation, e.g. backside, switch backside

Double corks Two corks

FIS International Ski Federation

Frontside rotation A goofy rider rotates clockwise and a regular rider rotates counter clockwise

Goofy stance Stance where the right foot is facing the direction of travel

Half-pipe Competition discipline where competitors perform tricks on the walls of a half-pipe which is a man made structure in the shape of the bottom half of a pipe with added vertical walls

Kicker Part of jump where take-off takes place

Knoll The edge between the plateau and landing

Landing The part of the jump designed to land on

Landing short Landing on the plateau or knoll

Plateau Part of jump between kicker and landing

Quarter-pipe Snow feature that resembles a quarter of a cross section of a pipe

Rail Metal bar used and/or designed to glide on

Regular stance Stance where the left foot is facing the direction of travel

Ride Moving on a snowboard

Rider A person that snowboards

Snow park Area at ski resort where collections of features such as jumps, rails and pipes are situated

Slopestyle Competition discipline where competitors perform tricks on jumps, boxes, rails and other man made features

Stance The position the feet have on the snowboard

Stoked Excited feeling about snowboarding

Stomp the landing Landing perfectly

Switch Riding with the right foot forward for a regular rider and riding with the left foot forward for a goofy rider

WSF World Snowboard Federation, international organisation for snowboarding. Organizes the World Snowboard Tour sometimes referred to as TTR