

THE B.I.S.C.C. SKIING WHITE PAPERS

Written by Bob Valentine Trueman IVSI Coach.

Relaxation.

RELAX! it's the only way you'll learn to ski better.

The two most commonly occurring hurdles to progress in skiing are *lack of comprehension* and *anxiety*. This paper is about anxiety, and its opposite – relaxation.

There is a feedback loop which could be either waiting to *get* you when you go skiing, or to help you. It's called the PERCEPTION-EMOTION-TECHNIQUE [P.E.T.] feedback loop, and it goes like this –

- If some part of your brain *perceives* that for whatever reason, your situation is dangerous for you right now, then –
- This will affect your *emotions* surrounding the experience – i.e. you will become anxious, or even afraid. This will then affect your *behaviours* – i.e. your technique –
- Your techniques are what you actually *do* when you are skiing. They need to be appropriate and skilful and when affected by negative emotions they simply become inefficient and ineffective. This leads to a reinforcement of your earlier –
- *Perception* - apparently confirming your original thoughts about the level of threat, and off go your emotions again.
- And so it goes on, ad infinitum

The stress response.

What is happening in your mind and body is what is known as the *stress response*. The body has two mechanisms for handling such stress. Firstly, the brain advises the sympathetic nervous system (SNS) that it thinks you might be in some trouble, and to do something about it.

The SNS then employs the adrenal medullae to produce chemicals called the catecholamines (epinephrine and norepinephrine) and release them into the blood

stream. The results, you know only too well – increased heart rate, raised blood pressure, increased breathing rate, high muscle tension, narrowing of visual field. At the same time certain other functions such as digestion become suppressed (so you get indigestion!)

A second system – the endocrine system – sees to the creation and release of a hormone called ACTH which gets the adrenal cortex to produce other hormones, the key of which is cortisol. What this does it seems is to help the body to make any stored fat and other carbohydrates more instantly available as a source of high energy.

Interestingly, your body will do this in any kind of stress situation. One highly respected psychologist has identified two kinds of stress – the one you and I might normally think of, *distress*, and the other being its opposite *eustress*. Your body will respond in exactly the same way to both of them, so the effects you experience will be the same whether you're scared (not nice) or for example, sexually aroused (nice).

Fight or Flight

Enough of the science – what we have here is the “fight or flight” effect. The body, responding to the way you are thinking, is preparing to fight off the Polar Bear that's about to come round the corner. However, you could argue that since you're not big enough to be successful in a fight with a polar bear, and since they can run at 40mph and you can't, it might actually be more efficacious to stay calm and relaxed so that you can remember (and be able) to keep facing her, and move backwards slowly and methodically so that you don't trigger her attack.

The reason this is difficult is that this fight-or-flight thing has been with us for 40 million years or so, and it is deeply entrenched in the hypothalamus which is not the most developed part of our brain, so we need to “unlearn” it so to speak, and replace it with more adaptive behaviour.

It's the same when you are skiing – if your mind says “whoa this is scary and dangerous”, and as a result you get scared, your body responds with a stress response, and things will only get worse; the old Perception-Emotion-Technique response, in which the technique gets worse instead of better. We perform better when we are inwardly calm, and widely aware.

The relaxation response.

So what we could do with, is a more adaptive response mechanism. A mechanism which would be more likely to enable us to respond in a way that helps us achieve our objective which in our case is to ski better, rather than worse, especially when things are looking a bit bleak and we could do with all the help we can get.

You will be happy to know that this beneficial response is perfectly possible, and that all the resources you need in order to be able to access it, are already in your possession. What may *not* currently be in your possession is the simple techniques – simple, but not easy – that will help you bring it about. However you can learn them.

There is a host of ways of bringing about a relaxed state in muscles and mind. Some address the “somatic” effects of stress – the muscle tensions and so on, which your unconscious mind is likely to interpret as signs of *distress*. Some are designed to operate on the “cognitive” causes and effects of stress – the thinking and perceptive processes which can both initiate and “feed-on” the somatic effects such as raised heart rate etc.

The great news is however, that whatever relaxation methods you use, the effect WILL be beneficial.

It is not the purpose of this paper to train you in relaxations techniques, but to explain why they are so rewarding in a sports context and to interest you in the possibilities. If you would like to know more, so that you can begin to train yourself in relaxation **email “stress@biscc.org.uk”**

ALL of the top international athletes in every sport have spent considerable time learning how to control their stress/relaxation balance. This is not of only hypothetical benefit, but is absolutely essential if you are to perform at your best, especially in “clutch” situations. For many of us, skiing itself often takes on the aspect of a “clutch” situation when the steepness of the slope, the weather, or the snow conditions turn against us.

A NOTE FROM THE BRITISH INTERNATIONAL SKI COACHING CLUB

On B.I.S.C.C. courses our coaches give short evening workshops on many aspects of skiing and relaxation techniques are almost always covered during the week. In addition they work with our members on snow and these techniques are used and practiced where necessary during the skiing day.

If you would like to know more **email us at “stress@biscc.org.uk”** and we will have a coach make contact with you to see how we can help. If you want course information email **courses@biscc.org.uk** or visit **www.bobski.com** where a course list is published.

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