

ORIGINAL ARTICLE

Debilitative interpretations of competitive anxiety: A qualitative examination of elite performers

SHELDON HANTON, ROSS WADEY, & DECLAN CONNAUGHTON

University of Wales Institute, Cardiff (UWIC), Cardiff, UK

Abstract

Research has not accounted for a small but significant proportion of elite performers who consistently report debilitative interpretations of competitive anxiety-related symptoms. Interviews were used to investigate elite athletes' precompetitive thoughts, feelings, and mental strategies underlying symptom interpretation. Six male athletes, from a variety of sports (M age = 23.3, SD = 2.2), who were currently competing within the UK, were found to hold debilitative interpretations. Data were drawn from verbatim transcripts and the content analysed. Four general dimensions traced the participants' precompetitive states and mental skills from early competitive experiences to the present day. Findings indicated that the participants reported early debilitating symptoms, which became habituated throughout their respective careers. Possible explanations as to why these elite performers consistently reported negative interpretations related to mental preparation and effectiveness, psychological skills, coping strategies, perceptions of control, and perceived self-confidence levels. The way in which the athletes are able to compete at an elite level, despite reporting debilitative interpretations, is also discussed.

Keywords: *Elite, direction, debilitation, facilitation, interpretation*

Introduction

Elevated anxiety levels were traditionally viewed as detrimental to performance; however, such perceptions have been challenged and disputed in studies from both mainstream (Alpert & Haber, 1960; Carrier, Higson, Klimoski, & Peterson, 1984) and sport psychology (Hardy & Parfitt, 1991; Jones & Cale, 1989; Mahoney & Avenier, 1977). This research led to the notion of "direction" of anxiety being introduced into the sport-psychology literature (Jones, 1991) and refers to the extent that sports performers interpret the intensity of cognitive and somatic symptoms associated with competitive anxiety as either facilitating or debilitating to upcoming performance (Jones, 1995; Jones & Hanton, 2001). To measure direction, Jones and Swain (1992) modified the Competitive State Anxiety Inventory-2 (CSAI-2; Martens, Burton, Vealey, Bump, & Smith, 1990) which originally assessed solely the intensity (i.e., level) of the response by including a scale to rate the level of debilitation and facilitation.

Using this modified scale, a considerable amount of research has investigated performers' directional interpretations. For example, studies have examined competitive orientation (Jones & Swain, 1992), performance and performance variance (Jones, Swain, & Hardy, 1993; Swain & Jones, 1996), skill level (Jones, Hanton, & Swain, 1994; Jones & Swain, 1995), goal-attainment expectancy (Jones & Hanton, 1996), the antecedents of state anxiety (Hanton & Jones, 1997), gender differences (Perry & Williams, 1998), temporal patterning (Hanton, Thomas, & Maynard, 2004), the nature of the sport and competitive experience (Mellalieu, Hanton, & O'Brien, 2004), psychological-skills usage (Fletcher & Hanton, 2001), and the personality trait of hardiness (Hanton, Evans, & Neil, 2003).

These studies have supported the contention that competitive anxiety symptoms are not invariably negative and, in certain individuals, can be interpreted as facilitative towards performance. Research has also established that the direction dimension may be a better predictor of performance and more

Correspondence: Sheldon Hanton, School of Sport, Physical Education and Recreation, University of Wales Institute, Cardiff (UWIC), Cyncoed, Cardiff CF23 6XD, UK. Tel: +44 (0)2920416952. Fax: +44 (0)2920 416768. E-mail: shanton@uwic.ac.uk

sensitive in discriminating between both personal and situational individual differences than the traditional intensity component (Jones & Hanton, 2001; Swain & Jones, 1996).

One variable particularly relevant to this study is that of skill level (Jones et al., 1993, 1994; Jones & Swain, 1995; Perry & Williams, 1998). Findings have consistently shown that elite international performers report significantly more facilitative interpretations of cognitive and somatic symptoms when compared to nonelite athletes despite no differences in intensity levels. In addition, elite athletes were also shown to have higher self-confidence levels. From such findings, however, it would be erroneous to assume that *universally* all elite performers consistently report facilitative interpretations of symptoms (Jones et al., 1994; Jones & Swain, 1995). For example, Jones et al. (1994) found that although 85% of the elite participants sampled were classified as “facilitators” (i.e., individuals who report positive interpretations for *both* cognitive and somatic symptoms), 15% of the elite performers sampled reported negative interpretations of associated anxiety symptoms (i.e., debilitators).

Qualitative studies that have examined skill level have also supported the quantitative findings (Hanton & Connaughton, 2002; Hanton & Jones, 1999a; Hanton, Mellalieu, & Hall, 2004) and have the potential to reveal the mechanisms underlying the directional response. For instance, Hanton and Jones (1999a) interviewed world-class swimmers and studied the acquisition and development of cognitive skills and strategies used to develop and then maintain facilitative interpretations of prerace symptoms. Specifically, it was reported that although the elite swimmers’ initial competitive outings were accompanied by negative interpretations, they soon learned that symptoms experienced in stressful environments could be interpreted as positive for performance. These developments were due to natural learning experiences (e.g., racing at different competitive standards) and educational methods (e.g., learning from significant others). Indeed, over time, the elite performers interviewed were also shown to have developed, practised, and refined precompetitive and prerace psychological routines. Such routines incorporated imagery, goal setting, and self-talk to aid the maintenance of facilitation. In a follow-up study, Hanton and Jones (1999b) demonstrated the utility of such findings and reversed performers’ negative cognitions. Specifically, this was achieved by implementing a cognitive restructuring intervention based on the information generated by the elite facilitators (Hanton & Jones, 1999a).

More recent studies have shown the importance of self-confidence and perceived control in attempting to account for directional interpretations. Essentially, confidence has been shown to protect performers against potentially debilitating thoughts and feelings encountered in competitive situations (Hanton, Mellalieu, et al., 2004). Moreover, symptoms perceived to be under personal control were related to facilitative interpretations, whereas cognitive and somatic responses perceived to be outside the performer’s control were interpreted as debilitating (Hanton & Connaughton, 2002).

Surprisingly, no study has examined elite performers who report debilitating interpretations of anxiety related symptoms, despite a small percentage being identified within sample pools (i.e., 15% [Jones et al., 1994], 17% [Jones & Swain, 1995]). Thus, this study is distinctive, being the first to investigate this intriguing cross-section of elite international competitors. The first purpose of this study was therefore to extend Hanton and Jones’s (1999a) findings by interviewing a sample of elite debilitators with the intention of establishing the competitive thoughts and feelings throughout their respective careers. The way in which the participants had acquired and developed the cognitive skills and strategies that underpin symptom interpretation was also discussed. The second purpose was to uncover *how* and *why* elite performers with debilitating interpretations are able to maintain superior performance levels at the highest competitive standards.

Method

Participant selection criteria

In order to meet the selection criteria, potential elite competitors were required to consistently interpret both cognitive and somatic symptoms as debilitating to performance. To verify that the elite performers were “debilitators”, a two-step procedure was implemented. First, all participants completed a modified trait version of the CSAI-2 with both intensity and direction scales (Albrecht & Feltz, 1987; Jones & Swain, 1992; Martens et al., 1990). The Competitive Trait Anxiety Inventory-2 (CTAI-2) has been successfully employed in recent studies (Hanton et al., 2003; Jones & Swain, 1995; Perry & Williams, 1998) and includes three subscales: cognitive anxiety, somatic anxiety, and self-confidence; each subscale comprises nine items. Respondents were required to rate the intensity of each item on a scale from 1 (*not at all*) to 4 (*very much so*) resulting in a score for each subscale between 9 and 36. Cronbach’s alpha coefficients for the intensity scale have been reported to range from .79 to .90 (Martens

et al., 1990). A direction scale (Jones & Swain, 1992) was included for cognitive and somatic anxiety subscales. This required participants to rate the intensity response of each item as either facilitative or debilitating to subsequent performance. This was completed on a scale from -3 (*very debilitating*) to $+3$ (*very facilitative*), with possible scores ranging from -27 to 27 . Internal consistency for the direction scale has been reported with coefficients ranging from $.82$ to $.89$ for cognitive anxiety and $.81$ to $.86$ for somatic anxiety (Jones & Hanton, 1996, 2001). Second, potential participants were interviewed to ensure that the inventory was interpreted correctly, and the elite competitors did consistently interpret symptoms as debilitating.

The mean scores for the intensity scale from the participants who met the criteria were 23.1 ($SD = 3.3$) for cognitive anxiety, 21 ($SD = 2.9$) for somatic anxiety, and 19.3 ($SD = 3.4$) for self-confidence. Average scores for the directional scale were -7.7 ($SD = 5.6$) for cognitive anxiety, and -6.2 ($SD = 4.8$) for somatic anxiety.

Participants

Athletes ($N = 103$) from a multitude of sports who were currently competing within the UK were invited to participate in this study; however, only six male elite performers aged within the range $21-26$ ($M = 23.3$, $SD = 2.2$) matched the participant selection criteria. In line with Hanton and Jones (1999a), the criteria for elite status involved all participants having competed internationally and won medals at major events (e.g., European Championships, Commonwealth Games). The performers had an average of 6.2 ($SD = 2.2$) years of elite standard experience. The sports represented were athletics, cycling (represented twice), soccer, rowing, and triathlon.

Instrumentation

Involvement progression questionnaire. Based on the recommendations of Hanton and Jones (1999a) and Scanlan, Ravizza, and Stein (1989), this study implemented an involvement progression questionnaire so that each participant's career had a developmental template. This allowed the interview to address the performers' thoughts and feelings at early and present time periods.

Interview guide and questions. The interview guide explored the participants' directional interpretations from initial exposure to sport, to the present day, and comprised four main sections. Section 1 oriented participants to the interview process, notified the participants of individual rights, and reiterated the

aims of the study. Section 2 addressed the events and circumstances surrounding the participants' initial involvement and discussed the accompanying thoughts and feelings, while also exploring clarification for debilitation. Section 3 addressed the elite performers' current mental skills, preperformance routines, and thoughts and feelings. Furthermore, this section aimed to elicit how the participants are able to compete at elite level despite reporting debilitating interpretations of symptoms and revisit the mechanisms underlying debilitation. The final section invited the participants to raise any points that may have been overlooked during the interview.

The structure of the session was based on Hanton and Jones's (1999a) guide, but some questions were withdrawn (e.g., how do you maintain your facilitative interpretations?) and others introduced (e.g., how do you manage to compete at an elite level, even though you interpret your symptoms as debilitating?). Pilot sessions were conducted and minor refinements made to question narrative and phrasing. A copy of the interview guide is available from the corresponding author.

Procedures

In line with the university's ethical-research guidelines, informed consent was obtained from the participants. Then, each participant was taken through an identical set of questions and asked in the same manner. Despite this standardization, the sequence of the questions varied with the flow of the interview, thus enhancing the fluency and richness of the data (Patton, 2002). Furthermore, a maximum of two predetermined probes were used per question in order to ensure that responses were as consistent as possible in terms of depth and complexity (Patton, 2002).

In line with previous research (Hanton & Jones, 1999a; Scanlan et al., 1989), two orienting instructions were presented in an attempt to minimize interviewee bias and memory decay. First, it was emphasized that the interview guide concentrated on initial competitive encounters as well as current experiences. Indeed, the importance of taking time over recalling previous incidents was emphasized; however, if there was no recollection, the participants were asked to inform the interviewer rather than guess (Hindley, 1979; Moss, 1979). In addition, to maximize retrieval and facilitate recall, a copy of the involvement progression questionnaire and interview guide was sent to each participant one week before their designated session, thus allowing them to prepare for the interview (James & Collins, 1997). Second, in an attempt to create an overall experience, the interviewees were encouraged to draw from other personal experiences outside the

sport in each stage (Hanton & Jones, 1999a; Scanlan et al., 1989).

All interviews were undertaken in person, during the winter months, by the same researcher and away from the competitive arena. This attempted to minimize the effect of the environment (e.g., atmosphere) and create a neutral and confidential setting. The main sections of the interview lasted approximately 60 min, were tape-recorded, and were then transcribed verbatim.

Data analysis

Inductive content analysis, as recommended by Patton (2002), has been successfully adopted in sport psychology (Gould, Eklund, & Jackson, 1993; Hanton & Jones, 1999a; Scanlan et al., 1989) and was employed in this study. Specifically, this involved the transcripts being read a number of times by the research team to ensure a sound knowledge and understanding of the data. Raw data themes (i.e., quotes or paraphrased quotes) from the transcripts were then revisited for accuracy and then compiled in list form. Content analysis was then conducted independently by the researchers to identify common themes, which eventually formed higher-order themes and general dimensions. Subsequently, members of the research team discussed their identified themes, which ultimately led to triangular consensus. Indeed, this process involved the research team reaching three-way agreement before progressing to the next stage of the analysis; therefore, enhancing the credibility of the findings (Lincoln & Guba, 1985).

Results

The results generated from the inductive content analysis are presented via hierarchical content trees (see Figures 1–4), which are accompanied with verbatim quotes to illustrate the findings. In total, 91 raw data themes emerged from the transcripts reflecting the participants' collated responses. These were abstracted into 13 higher order themes and subsequently four general dimensions. The number of citations in each general dimension is presented in Table I.

Section 1: Early and present thoughts and feelings

Early debilitating symptoms. Figure 1 depicts the debilitating symptoms reported by the elite performers in the early years and results in three higher-order themes. Negative cognitive symptoms pertained to the participants' thoughts about the match or race and also towards preparation. The most frequently cited concerns focused on the

competition itself (e.g., being worried about making mistakes, being scared of competing, and fears of finishing last). The following account provided by the rower offers an insight into his early cognitions:

You had tons of thoughts going round, the race is sort of going on in your head and you're sort of thinking am I going to be left here? Is everyone going to finish and I'm still going to be half way down the course?

Negative somatic symptoms included the athletes' experiences of uncomfortable physical responses. For example, constantly needing to visit the toilet before competition, feeling tense, having butterflies, and difficulty in breathing. The athlete reported:

I remember back then, before competing, I always went through a range of feelings; similar to how I feel now before competitions actually. . . . I usually felt sick, had butterflies in my stomach, my legs often felt really heavy and I felt a bit lethargic to begin with. I always found the lead up to competition a horrible and traumatic experience.

In addition to the negative physical and mental symptoms, the participants also reported negative self-confidence levels. One cyclist commented:

When I was young I didn't really have any self-confidence as everything was new and I was so inexperienced and obviously still learning. I didn't know what to expect. Also combined with all the nerves and anxiety I felt I just didn't have much confidence going into competitions.

Present debilitating symptoms. The elite debilitators' current anxiety-related symptoms were also elicited (Figure 2). The participants continued to report match or race and preparation concerns, such as worrying about letting people down and doubts about their race plan, while also experiencing negatively interpreted somatic symptoms. For instance, the following accounts from the soccer player and cyclist, respectively, detail such symptoms:

Before a match I can get really nervous about doing well and what the outcome is going to be. I do have doubts; I do go through phases of doubts a couple of hours before. I'll have doubts about whether I am actually going to perform well, which makes me tense up and feel sick.

The couple of hours leading up to a race can be quite intimidating when you see a lot of other people and you're trying to work out how good they are. When I race abroad everybody looks like top professionals. They all look the same, really

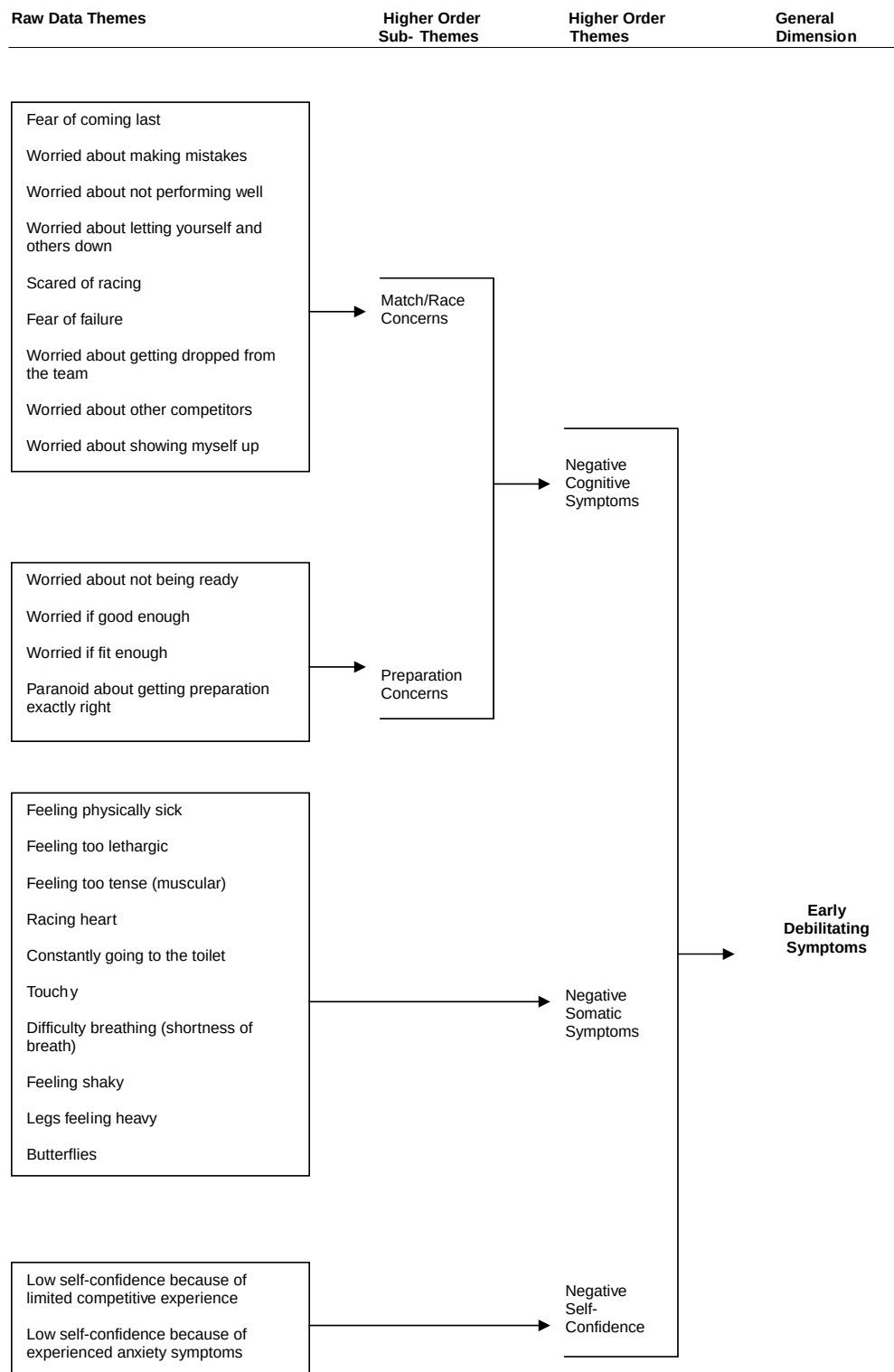


Figure 1. Early debilitating symptoms.

well organized, and got a really good backup team. And you look round and you don't see anyone who doesn't look good, and you think this is going to be hard. That would play on my mind and I would get nervous. I would start doubting myself, like I'm never going to win this, and then

I feel sick, my heart starts racing, I start going to the toilet more often, and I double check everything.

Despite the number of raw data themes reducing from early experiences, such debilitating symptoms

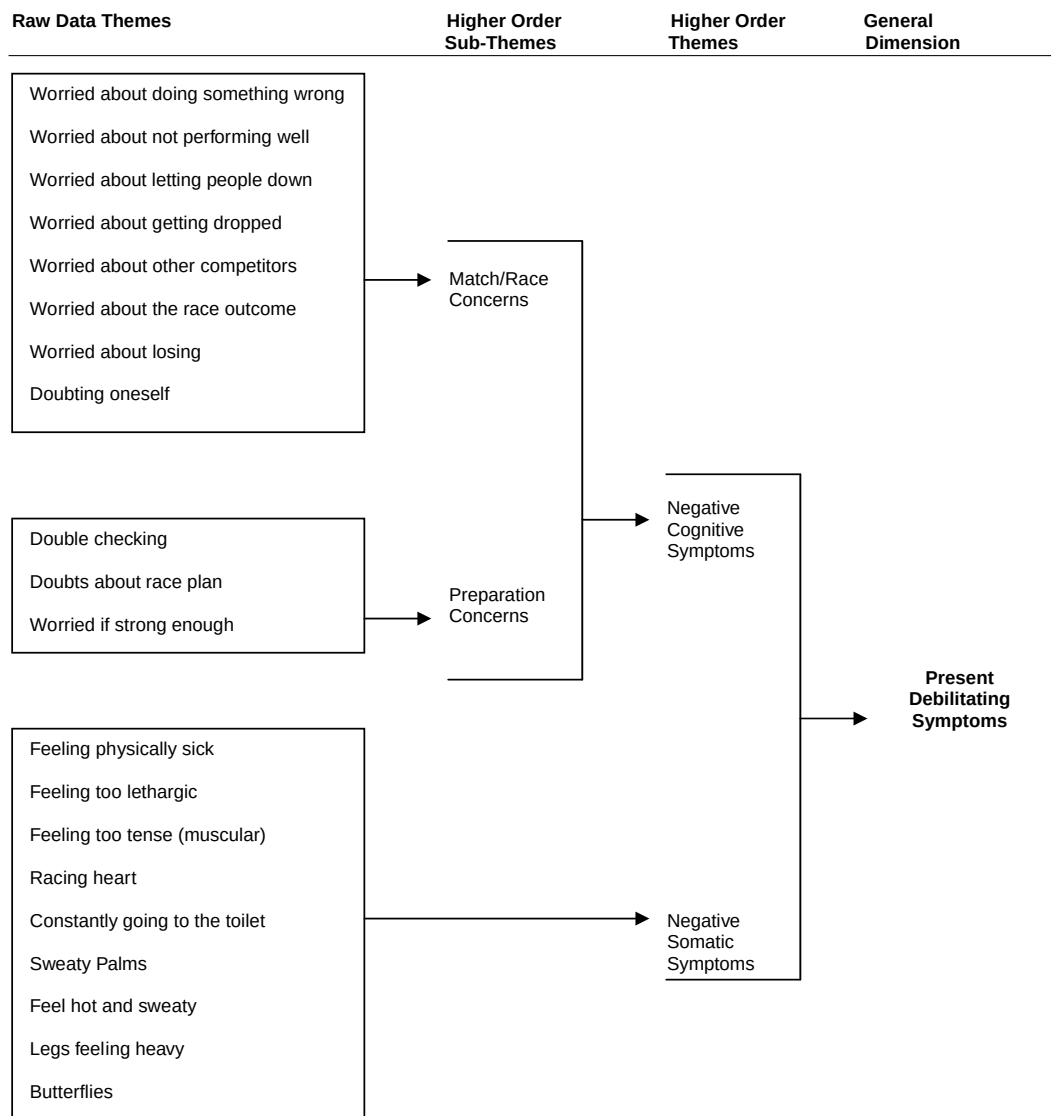


Figure 2. Present debilitating symptoms.

were reported to be more intense. For instance, the rower reported:

I can still get myself worked up to the same sort of level because all my money, all my time and everything I do goes into this [rowing]. When you do rock up at competition, you realize everything you've done over the last year in training, all the money you've spent, all the different stuff you've done and all the sacrifices you've made is for this race. . . . There are moments that it hits you, that all the training day-in-day-out stuff is for this race. So before a race I can get really nervous, really tense about doing well and what the outcome is going to be. You're always thinking about what's going to happen, are you going to do something wrong? Are you going to lose? Are people going to be suddenly better than you are? The intensity has increased just because the

commitment has increased. As I've committed more and more to my sport and my training obviously doing well is going to mean a lot more. If I put all that intensity into my training and I lose, it's almost like what was all the training for? It's all about winning.

Section 2: Acquisition and development of cognitive skills and strategies

Figure 3 shows the present preperformance routines adopted by the elite athletes prior to competition. In total, 30 raw data themes emerged, generating six higher-order themes. The participants adopted a number of psychological skills that included goal setting, self-talk, mental imagery, and relaxation; however, such skills were used without full realization or an appreciation of precise terminology. The rower stated:

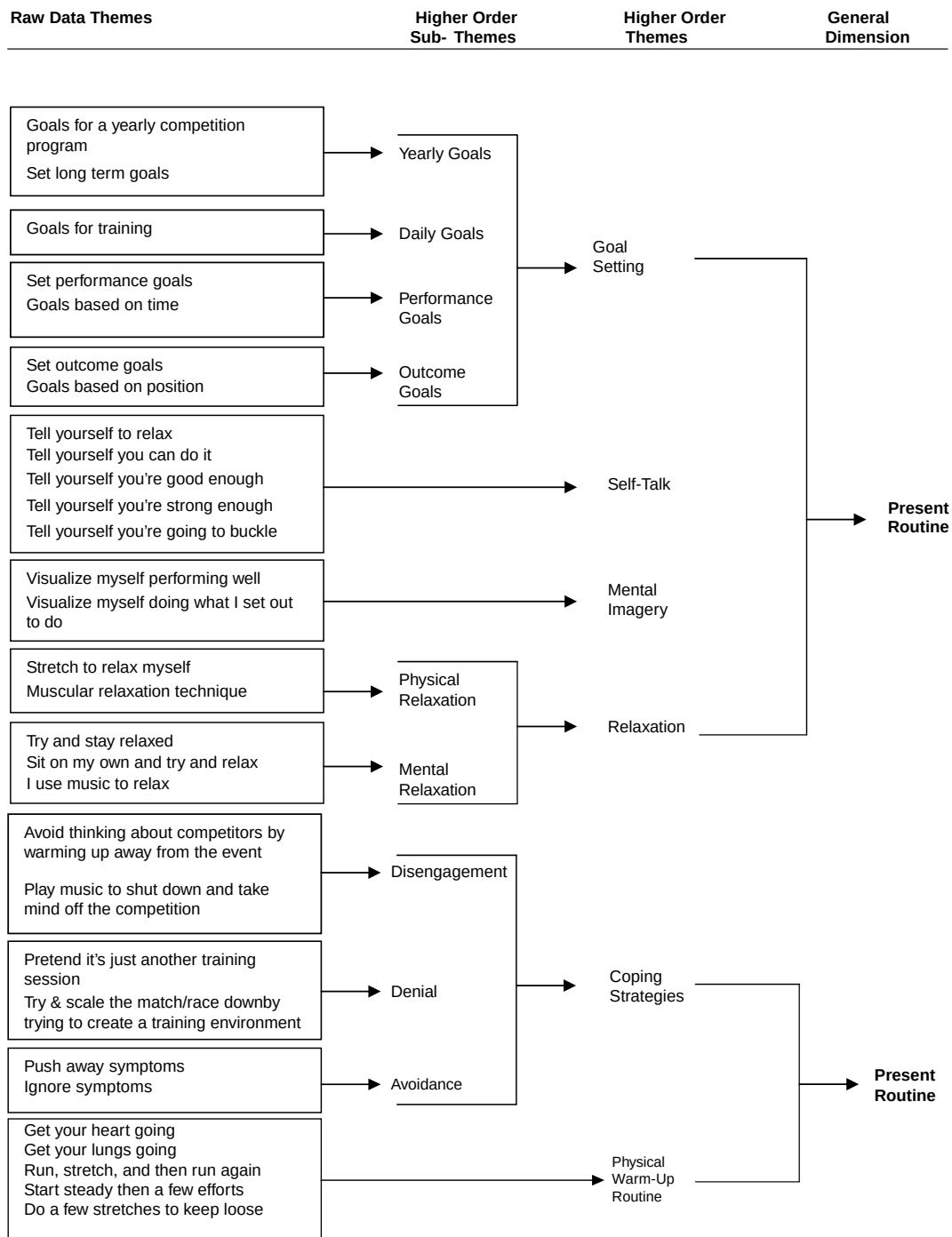


Figure 3. Present routine.

I have tried psychological skills, often without realizing it though—it's something I've done sub-consciously I think. I mean I didn't know the proper names until recently, it's just things I've started doing myself. I haven't been taught or tried to learn more about such skills. I don't really feel I have the time as I am so busy training so whenever I do have a free minute I just want to sleep.

Goals were generated both by the athletes and, on occasion, with the help of coaches. The types of goals

set were yearly and daily goals, and also outcome and performance goals. It was evident, nevertheless, that these goals were perceived as very difficult to achieve and often unrealistic. The athlete expressed:

Sometimes when I'm competing and it's not going to plan, I get upset that I'm not going to achieve the testing goals I set myself. Sometimes I think I can lose it mentally. Not necessarily drop out, not give up but you're going through the motions and may just psych yourself out.

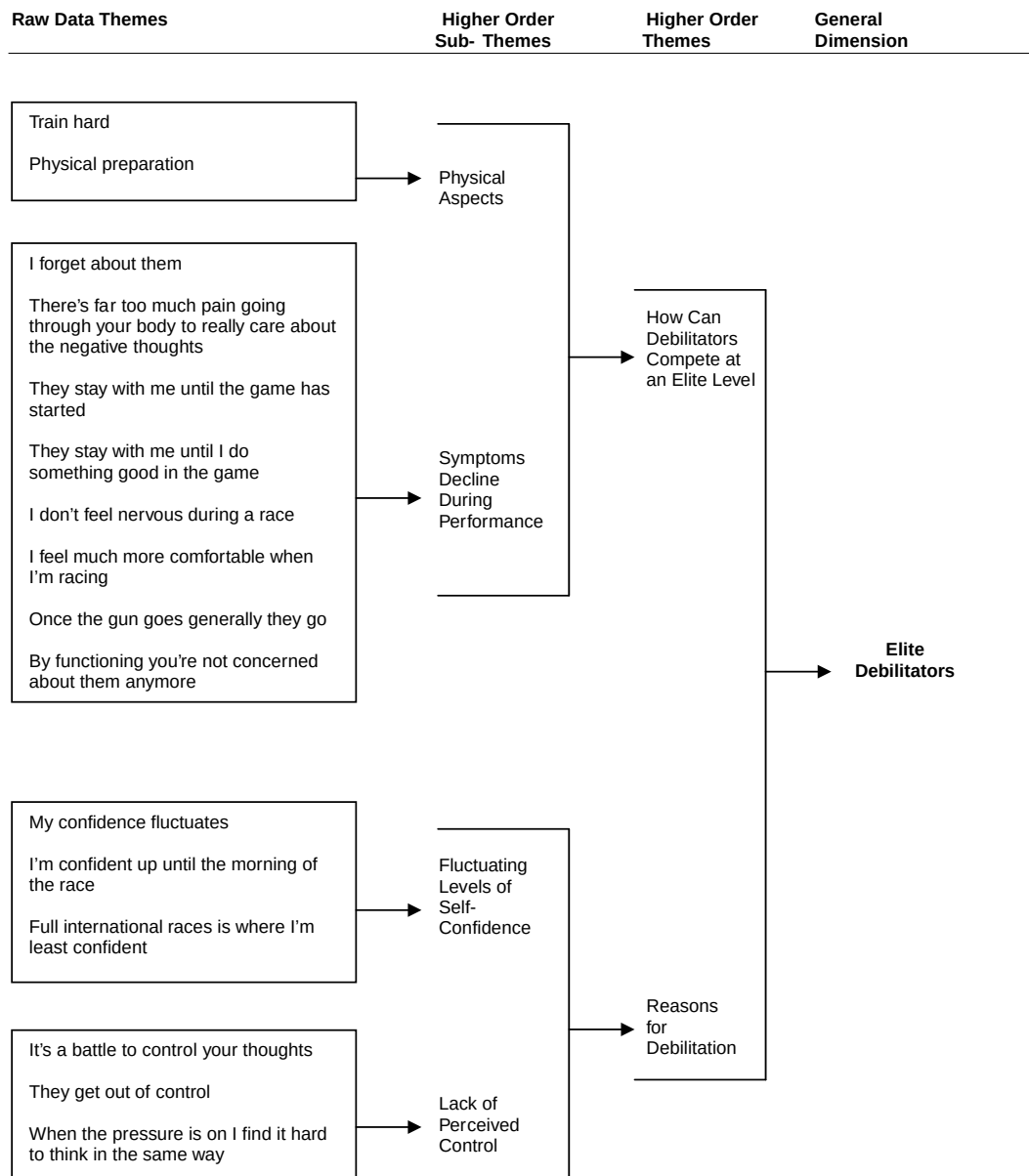


Figure 4. Elite debilitators.

The self-talk reported by the interviewees involved positive comments such as “Tell yourself you’re good enough”. Even so, such encouraging verbalizations were reported to be short lasting and hard to maintain, ultimately turning to negative cognitions. One of the cyclists described this process from positive to negative self-talk:

I try to be as positive as I can—I say things to myself like “You’re good enough”. But sometimes I find that negative thoughts creep in and they get in the way and start to replace these positive statements. Then I start repeating these negative thoughts in my mind, like “You’re gonna buckle” and they start to take over. I try not to, but I think

it’s inevitable really. It’s something I find hard to control and manipulate.

Mental imagery was used by the participants and involved attempts to visualize good performances in their respective events. It was apparent though that these elite performers had not mastered this skill and were going through a process of learning and refinement. The soccer player remarked:

Imagery is a skill you don’t just do it naturally you get better at it with practice. Your ability to control the images improves. . . . I still think I can do better as negative images still creep in and my mind runs away with me.

Table I. Frequency analysis of the raw data themes.

Dimension/higher-order theme	Frequency count
Early debilitating symptoms	6
Negative cognitive symptoms	6
Negative somatic symptoms	6
Negative self-confidence	4
Present debilitating symptoms	6
Negative cognitive symptoms	6
Negative somatic symptoms	6
Present routine	6
Goal setting	6
Self-talk	5
Mental imagery	3
Relaxation	4
Coping strategies	5
Physical warm-up routine	6
Elite debilitators	
How can debilitators compete at an elite level?	6
Reasons for debilitation	5

The participants reported attempting both mental and physical relaxation techniques. For mental relaxation it was clear that participants were not proficient as the following quote from the triathlete demonstrates:

I try and mentally relax by playing music as I find this helps me stop thinking negatively and therefore helps me unwind; however, as soon as I stop listening to the music the thoughts and the nervousness just come straight back and I'm back at square one again. It's just a never-ending battle.

Attempts to physically relax included stretching or following a structured muscular relaxation format, but these were short-lasting and often used incorrectly. One of the cyclists stated:

I had a muscular relaxation session on tape that I played before a race. It was near the end of the season and was something I did for one or two months and let slip really. But to be honest I didn't have much confidence in the fact that it will help me, which I think was more my mindset at the time. I was thinking it's a very physical sport; it's a physical problem. All I've got to do is train harder, make myself stronger and concentrate on the physical side of things.

Despite adopting these psychological skills prior to competition, the participants failed to practice and refine them. Thus, such skills were not deemed effective as the following quote from the athlete reveals:

Well sometimes these skills do work for me, but I think I could use them better and more effectively.

I mean I don't practice them in training; I just try and use them if I get time before competition—imagery and self-talk and things like that. So I wouldn't say they were very effective, it fluctuates, I find it hard to control my thoughts. I attempt to have positive thoughts but these are often overridden by negative thoughts, which is frustrating to an extent.

Such skills were also only used if time was available after physically warming up (Figure 3), which the elite performers perceived with great importance. The triathlete reflects such sentiments in the following comment:

I do use psychological skills before I compete if I have the time. Firstly, I physically warm up as the majority of my routine focuses on me getting physically ready for competition and making sure everything is in place. I feel this is a priority over the psychological stuff. Then I've 10 minutes normally spare just before the race starts. Just for anything else I need to do, which is where I would usually do some psych skills and just to try and relax.

In an attempt to reduce the anxiety-related symptoms, the performers adopted three different styles of coping. Disengagement involved the participants attempting to escape from the stressors inherent within the competitive environment. This form of coping is demonstrated in the following quote from the athlete along with its perceived effectiveness:

In order to cope with the nervousness and to avoid thinking about my competitors I've resorted to preparing myself away from the event. I just try and forget about it and get away from all the hustle and bustle of competition in order to get rid of the feelings. I do find it helps to a certain extent, but it's hard, because although you're not in the arena you can still hear the crowd and the spectators going in and out. So I wouldn't say it's particularly effective, but I don't know any other way.

Participants also attempted to deny the significance of the competition. In response to the effectiveness of denial, participants were not entirely confident. For example, the soccer player reported:

Recently I've tried to lower the importance of the competition by pretending it's another training session. A friend told me to try this as it can help reduce some of the anxiety I feel before competing. I perform well in training, probably because I don't have the nerves, but when a

competition comes around that's when I start getting butterflies and so forth. So if I try and recreate my training session in my mind it will hopefully lower my anxiety and make me perform better. It makes sense to me anyway. . . . So far it hasn't proved that effective, but I've only recently started doing it, so hopefully it will improve.

In a final effort to cope with the related symptoms of anxiety the elite performers also endeavoured to avoid such symptoms. The following account from the rower reflects such an attempt and also indicates the level of effectiveness:

I try and keep as busy as I can before competition so I can avoid thinking about them [symptoms]. This does help, but it's very tiring. I'm always rushing about and playing my music louder and louder, and by the time I do start, I feel shattered, which isn't how you should feel. So taking that into consideration, I suppose it's not that effective, but I think it's probably better that way than actually letting the negative thoughts run riot. I'm almost pushing them away rather than discovering why I do actually think about them. Thinking about it now, I should really look to find some way of getting the symptoms to help me.

Section 3: Elite debilitators

Figure 4 reveals how and why elite competitors with debilitating interpretations are able to compete at an elite level. Not surprisingly, the participants initially responded to how they managed to compete at an elite level with a degree of uncertainty; however, they eventually attributed the importance placed on the physical aspects of sport at the expense of the time devoted towards psychological skills development and ongoing training. Moreover, due to this mindset, the participants interpreted symptoms associated with competitive anxiety as primarily a physical rather than a mental issue. The quotes below, from one of the cyclists and the rower respectively, reflect such sentiments:

I train hard! My life evolves around training, I live, breathe and eat training! Sometimes I really feel that's all I ever do. I did once see a sports psychologist and she recommended I attempt relaxation as I was getting quite worked up before race days; however, I just didn't feel it was for me. My thinking at the time was it's a very physical sport; therefore it's a physical problem. I just thought I've got to train harder and longer.

I suppose it's just the long hours of preparation, planning and hard work I put in. I don't feel that some silly negative thoughts should get in the way

of my performance, especially after all my physical efforts and all the financial expense that comes with my sport. Then again, if I'm honest, they [symptoms] have influenced my performance in the past and no doubt probably will do so again at a later date. It's so frustrating though as I train so hard and put so many long hours in, and when it comes to competition I sometimes feel all that stands in the way of me achieving my goals is these stupid negative thoughts. When I don't achieve my goals, my attitude has been to go away and train harder, but I'm getting to the stage now where I don't feel I can train any harder. I'm now looking for new innovative ways of training. I also am [be]coming more aware of psychology actually, but I don't know where to start or what to do.

Participants also reported that, despite being debilitated by symptoms in the preparation phases of competition, the knowledge that their symptoms generally, but not always, subsided after the initial phases of their match or race was reassuring for them and consequently allowed them to compete at an elite level. The following quotes from the rower, soccer player, and triathlete, respectively, depict such cognitions:

These thoughts do mess me up beforehand, but once I'm really into a race I kind of forget about them. You're just functioning and not consciously thinking I'm nervous, how am I going to cope with it? There's far too much pain going through your body to really care about the negative thoughts. Realistically, I spent so much time in the boat training and doing pieces and that's where I feel most comfortable. So, I suppose they're not really messing up performance as such, they're just messing up my head and preparation.

I stay with them [the symptoms], well they stay with me, until either the game has got started or I do something good in the game. Generally, they then usually go away which is good and helpful to know because otherwise I would be all over the place out there and probably wouldn't be able to compete at this level.

When they say "Go" you're pretty much in control, unlike before, and you know what you're doing. If I give you an example, the first 50 metres of the swim I can feel a little bit anxious, but always once I get out the swim and I'm on me toes and get on my bike then I'm fine. You forget about everything, you're just thinking exactly what you're going to do—what gear you're supposed to be in. You get to the run and you're just thinking about hanging on and trying to go as hard as you can.

Although possible explanations for debilitation emerged from the sections of the interview that tracked the participants' respective careers, such reasons were revisited. Specifically, participants in the penultimate section of the interview were questioned with reference to the mechanisms underlying debilitation. In response, perceived control over symptoms and self-confidence levels offered potential reasons for the negative thoughts and feelings experienced. For instance, asserting control over cognitive and somatic symptoms in advance of competition was reported by the participants to be a challenging and unsuccessful task. This is emphasized in the following comments from the rower and athlete respectively:

Before the race you're almost having a battle in your head about all these different things, some of them negative and some of them positive. It's a battle to control your thoughts—you're always trying to outweigh the negative and make sure you reach the start line as calm and focused and as positive as you can. But, you're always going to have those doubts there.

It's the lead up which is horrible, it's the lead up where you've got all these negative thoughts or doubts going in your head, and there's so many other things to think about, so many distractions going on. It's the lead up to the race where you're struggling to try and control your thoughts.

Fluctuating levels of self-confidence were also reported, and this was shown to influence directional interpretations and performance. The following account from the soccer player emphasizes this:

My confidence fluctuates dramatically, sometimes I can be confident and positive about my abilities, but mostly I just feel quite low about things and I wonder if I'm good enough. I sometimes feel like a novice compared to others I train with or compete against. I would love to be able to be consistently self-confident, as when I am more confident my nervousness doesn't seem to have such a negative influence and I seem to perform better—a lot better.

Furthermore, self-confidence levels were shown to fluctuate in the time leading up to competition and as the standard of competition increased. Such sentiments were reported by one of the cyclists:

Overall I'm confident up until perhaps the morning of the race, which is when I would start doubting myself. When the pressure is on I find it hard to think in the same way sometimes, my gut response will be totally different. This is

dependent though on the level I am competing at. For instance, some races I'm pretty confident, yeah I'd say I'm confident definitely before. Other higher standard races I'm not as confident, but I'm fairly confident I know I can do something in the race. Full international races is where I'm least confident and I'm still quite nervous beforehand.

Discussion

The purpose of this study was to investigate a select sample of elite debilitators with the aim of establishing the acquisition and development of cognitive skills and strategies that underpin such directional interpretations. Furthermore, this study aimed to reveal how and why these highly skilled performers are able to compete at an international level. In order to achieve this, an exploration of elite debilitators' precompetitive thoughts, feelings, and mental strategies was examined using interview techniques.

In line with the elite international swimmers in Hanton and Jones's (1999a) study, the participants reported negative interpretations of both cognitive and somatic competitive anxiety symptoms early on in their careers. One difference, however, was that the elite debilitators reported more widespread negative experiences. Specifically, 25 different raw data themes emanated from the transcripts in this study in contrast to the 13 raw data themes derived from the elite facilitators (Hanton & Jones, 1999a). In addition, the participants reported negatively perceived self-confidence levels from an early age possibly as a result of being inexperienced in the competitive arena, and from encountering negative cognitive and somatic symptoms.

Interestingly, the participants' thoughts and feelings, and self-confidence levels, were still not interpreted positively after they had developed and gained experience throughout their careers. For instance, many of the debilitating symptoms remained prevalent, and self-confidence was reported to fluctuate closer to the event and particularly at the higher level of competition. Possible explanations for this include that the participants *did not* go through the development stages reported by Hanton and Jones (1999a); therefore, such competitive anxiety-related symptoms appear to have become habituated and ingrained within the athletes. Also, according to Vealey, Hayashi, Garner-Holman, and Giacobbi (1998), such perceptions of self-confidence may have resulted from the participants placing limited emphasis on mental preparation. Moreover, the participants' ever changing self-confidence levels were reported to influence directional interpretations and performance levels (Hanton & Connaughton, 2002; Hanton, Mellalieu, et al., 2004; Jones &

Hanton, 2001). Indeed, Hanton, Mellalieu, et al. (2004) recommended that performers develop a range of confidence management strategies to maintain confidence levels in order to protect against negative symptom interpretation and to enhance performance.

Once the elite performers became fully committed to sport, they developed a preperformance routine; nevertheless, these routines were not as well established or effective as previous research on elite performers' routines would suggest (Hanton & Jones, 1999a; Orlick & Partington, 1988). Indeed, a strong focal point of these elite athletes' routines concentrated on physical training and preparation over and above any mental training. Participants explained how perceived physical readiness enabled them to compete at an elite level, despite reporting debilitating interpretations. Despite such symptoms negatively influencing their preparation, the knowledge of dissipation actually during competition was reported to act as a reassurance mechanism. Associated research, however, has consistently shown successful performers, when compared to unsuccessful performers, to demonstrate greater mental preparedness (Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999; Gould, Weiss, & Weinberg, 1981; Orlick & Partington, 1988; Smith & Christensen, 1995). Evidently, mental readiness is critical to achieve the highest levels of performance and, according to the swimmers in Hanton and Jones's (1999a) study, is also important in maintaining facilitative interpretations of symptoms. Therefore, "somehow the misconception persists that if one practices and trains hard enough physically for a competition, everything else will magically come together" (Williams & Harris, 2001, p. 229).

Despite the low prioritization afforded to mental preparation, the participants would attempt to prepare mentally in order to reduce the undesired symptoms, if time were available after physically warming up. This involved a number of different psychological strategies, but the skills employed by the participants were deemed to be ineffective. This may be, unlike the participants in Hanton and Jones's (1999a) study, because the participants failed to practise the mental skills in preparation for competition. Research has shown continual practice of mental techniques to be associated with more successful and consistent performances, especially at the highest levels (Cumming & Hall, 2002; Gould et al., 1999; Orlick & Partington, 1988; Smith & Christensen, 1995). For example, the Olympic athletes in Orlick and Partington's (1988) study reported that they felt they could have obtained their best performances much sooner, had they strengthened their mental skills earlier in their careers. Furthermore, the effective use of psycholo-

gical skills has been demonstrated to play an important role in maintaining a facilitative interpretation (Fletcher & Hanton, 2001; Hanton & Jones, 1999a, 1999b).

The psychological skills adopted by the participants in this investigation, included goal setting, self-talk, mental imagery, and relaxation. Goals were generated by the athletes and sometimes with the coach's assistance but were found to be difficult and unrealistic. Possible reasons relate to the setting of outcome and performance goals, and not process goals. This was at variance with the elite facilitators (Hanton & Jones, 1999a) who reported setting all three types of goals. Research has shown outcome goals to be outside the control of the performer and to be associated with increased anxiety, lowered self-confidence and decreased performance (Burton, 1989; Gould, 2001; Martens, 1987). Furthermore, such reasoning may explain why the participants reported limited control over competitive anxiety symptoms. Burton, Weinberg, Yukelson, and Weigand (1998) recommended that athletes be educated in process-orientated performance goals that are under personal control to a greater degree. Such advice, in accordance with directional research (Hanton & Jones, 1999b; Jones, 1995; Jones & Hanton, 1996), will encourage the development of facilitative symptom interpretations.

With reference to self-talk and mental imagery, participants explained that trying to exert control over negative verbalizations and images was an arduous task. According to research, such debilitating images and statements are associated with detrimental performance effects (Munroe, Giacobbi, Hall, & Weinberg, 2002; Van Raalte et al., 1995). Attempts to reduce the competitive anxiety symptoms using relaxation strategies were short-lasting and also perceived to be ineffective. For example, the participants reported listening to muscular relaxation sessions preceding competition. According to Jones (1993), such techniques should not be used prior to competition until they have been modified from a 20 min session to just a few seconds.

The participants also attempted to reduce the debilitating symptoms by putting in place techniques to cope. The strategies included disengagement, denial, and avoidance but were also reported to be ineffective. Indeed, Finch (1994) examined the coping-performance relationship and found mental disengagement and denial coping strategies to be associated with decreased performance. Avoidance was also identified by Endler and Parker (1990) and was considered inappropriate for long-term management of negative thoughts and feelings. Altogether, research has portrayed the three coping strategies employed by the participants to be maladaptive and as such has emphasized that efforts should be

employed to educate and provide psychological support to performers who use such potentially destructive coping strategies (Hardy, Jones, & Gould, 1996). Alternatively, athletes should aim to actively challenge competitive anxiety-related symptoms, as exemplified by the elite swimmers in Hanton and Jones's (1999a) study, who rationalized prerace thoughts and feelings as not only being beneficial but also a prerequisite for performance excellence.

Despite the unique population examined, the study does suffer from certain limitations. First, drawing retrospective thoughts and feelings from the elite debilitators impedes the possibility of causal conclusions. Second, the sample pool is limited and diverse; however, it is noteworthy that over one hundred athletes were invited to participate. Third, the elite debilitators in this study were only moderately debilitated by competitive anxiety-related symptoms. Indeed, elite athletes who are severely debilitated by competitive anxiety warrant closer inspection.

In summary, this study elicited the thoughts, feelings, and practices of current elite debilitators and investigated how and why such athletes can compete at an international level. The findings, alongside Hanton and Jones's (1999a) results, highlight the importance of employing effective psychological skills and coping strategies to prevent debilitating interpretations becoming habituated.

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