Putting it together: skills for pressure performance

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Introduction

When the time comes to perform at the highest level there is no margin for error and there may be no second chance. Years of training, effort, money and personal sacrifice can be condensed into a few brief moments in which aspirations can be reached or dashed. For performers, aspiring to be the best means that the odds are always against them. In an Olympic sprint final seven people will fail to cross the line as gold medallist; many more climbers attempt Everest and turn back than summit out; a dance company has a single lead. The reality is that more performers fail to attain the ultimate goal than succeed in their aspirations. Most performers recognize this challenge, which is reflected in the detail and effort spent on physical conditioning, but simply being in the physical condition to perform is just one facet of preparation towards producing the performance levels necessary at the right times. This chapter begins with a focus on the critical need for thorough mental preparation and planning that should be completed prior to performance. As Michael Johnson (1996, p. 25), holder of five Olympic and nine World Championship gold medals, noted, ‘commitment and preparation are all that mark the differences among an arena full of perfect physical specimens’.
SECTION FOUR

Performance

Most physical performers tend to practise and train more than they perform and in some cases the training:performing ratio can be very high. For example between September and December a swimmer completed high-volume training for 16 weeks, up to 20 separate sessions per week (pool- and land-based) and had just one competition at the end. While this example may be extreme (a training: performance ratio, in days, of 112:1), this trend – mostly practice compared to full performance – is typical across most physical performance domains. The consequence of this is that performers are focused on getting physically and mentally able to perform at the highest level, but mostly within training and practice environments and contexts. Crucially, they are not as used to performance itself. Equally significant is that for many performers the real pinnacle challenge or major event is in an unfamiliar environment and may involve travel, time away from home and changes to diet, accommodation, time zone and climate. There is a lot of opportunity in these circumstances for disruptions to occur and for the hard work and effort of performers to be undone by issues that might be categorized as practical logistics, best addressed through careful and thorough performance planning.

While thorough planning and preparation focus on attempting to control the controllable, equally important is ensuring that performers are competent and trained in adapting to the uncontrollable. Elite performers often have to find a way to maintain good levels of performance even when things are not going right. Niggling injuries, adverse conditions, distractions and demands of a life outside performance, and plain bad luck, will be encountered by most performers in their careers. But being able to sustain performance levels despite these factors is critical. To achieve this, performers need to be able to cope, be mentally tough and control attention and emotion. Thus the content discussed in detail in the preceding chapters needs to flexibly applied, in combination and in response to the changing performance environment and perceived demands. Furthermore, successful use of the techniques and skills outlined in this chapter can only be achieved if they are well learned and practised long before they are really needed to support and maintain performance in truly demanding circumstances.

This chapter concentrates on the performer at an individual level but many performers operate as members of an interacting team, so the specific approaches that can be used to enhance team performance are explored in Chapter 24. The overall focus of the chapter is to illustrate and explain the ways in which psychology, psychological techniques, practical strategies and common sense can be combined to allow performers to perform at the highest level and against the odds. At the players’ entrance to Centre Court at Wimbledon two lines of poetry encourage tennis players to prepare to meet either triumph or disaster. However in relation to the focus of this chapter the opening words of the same poem (Rudyard Kipling’s ‘If’ (Kipling 1924)) capture the challenge to performers, psychologists and practitioners: ‘If you can keep your head when all about you Are losing theirs’.

Planning and preparation

Planning and preparation are essential to ensure that key tasks are completed and everything is in place. and to avoid events that might disrupt the performer and performance itself. It might appear almost impossible to imagine that an athlete might arrive at the Olympic stadium without their running spikes, that a performer selected for a prestigious international tour might fail to bring their passport to the airport or that a performer might drink, ‘by accident’, 2 litres of fluid in the hour immediately before their important performance, leaving them feeling heavy and bloated. However all of these events really did occur with mature, experienced performers and aptly demonstrate the need to attend to detailed planning and preparation. Even factors that have never gone wrong, been forgotten or caused problems in the past should be considered in planning, as these are still susceptible to failure or error with the increased pressure, challenge and tempo of high-level performance environments.

Good preparation not only avoids pitfalls but is an important factor in enhancing self-confidence and reducing the potential for cognitive anxiety (Jones et al 1990). Thus thorough and detailed planning and preparation will help to ensure that performers are in the optimum mental state in the period leading up to their performance. Performers also often mistakenly assume that planning and preparation is only concerned with the time up to the start of their performance. However, performers will benefit from thinking through the elements of their performance and the possible permutations that might occur and
plan their strategic and tactical response to these. The fastest athlete in the world may sprint 100 m in under 10 seconds but they will have completed several races over 2 days to qualify for the final. In this time they might have taken strategic decisions to put in performances to worry opponents or to conserve themselves, or a combination of these, and may well have contended with a false start that would alter the potential risk of being disqualified and consequently influence their tactics. They should have prepared and planned for all these circumstances. Even an event of less than 10 seconds duration demands high-level planning if high-level performance is the goal. The critical relationship of planning to performance was exemplified by Michael Johnson (1996, p. 212), who explained his own attention to planning: ‘Earlier in the day of competition I have met with my coach and we’ve gone over every outstanding detail. Where will I go between races? Will I stay in the stadium or return to the warm-up track? When will I begin my final warm-up? I want every detail considered and planned.’

Expert opinion, research and common sense all converge on the need to plan and organize preparation carefully. But common sense is often not common practice and some of the key issues that prevent planning taking place are that performers do not know how to plan, what content should be included or what time periods the plan should cover. In this section we will explain the way in which planning can be undertaken, ranging from simple analytical frameworks to structure the process and performance segmentation through to ‘what if’ sessions and contingency planning. In the process we will also discuss the content of planning. However it is self-evident that for all physical performers the essential cornerstones of food, fluid and sleep remain fundamental considerations to being well prepared and should feature in the content of all planning. Planning should be explicitly addressed long in advance of performance with increasing detail and modifications nearer the time as the precise details and schedules become known. Physical performers often find that planning is not intrinsically motivating and there is a role for performance psychologists to ensure that this is done and, if necessary, to facilitate and cajole until it is. For planning, two heads are better than one and performers, plus any of performance managers, psychologists, other support specialists, coaches and directors are likely to be represented in an ideal planning group.

Preperformance planning

It is beneficial to have a structure against which to organize planning and Taylor (1995) identifies four elements: physical, technical, logistical and psychological (also sometimes referred to as technical tactical, physical and mental (TTPM) that can be used as the basis for analysing performance needs in planning. Consider the example in Figure 23.1, taken from athletics (thanks to Dave Collins for the idea and ace logisticians David Dix and Simon Nathan for the refined model). It is possible to see the basis of this framework but with extended detail to separate medical and physical from physiological (dominated by plans for eating and drinking!). This example also emphasizes the need for planning to be time-phased and to contain key information (dates, locations, availability of personnel, contacts and resources). It is important that this information is made available for a planning session to be effective and efficient and that plans are updated as details, change, evolve and emerge.

The example shown in Figure 23.1 is a general plan and one that should be individualized and added to by each performer to provide the level of detail necessary. The plan makes allowance for an individual’s psychological content; however, it is the psychological impact of reducing uncertainty and avoiding practical and logistical errors that is the primary reason for advocating their use.

The specific psychological needs of performers can be further addressed through individual plan such as the one suggested by Rushall & Potgieter (1987), who utilize a strategy planning sheet with three categories of information:

• **Primary behaviours**: functional activities that are almost inevitably going to happen, such as getting changed.

• **Coping behaviours**: planned responses or actions to be completed at certain times (despite the term, Rushall & Potgieter include activities such as mental rehearsal not in response to another thought or action but just because it is part of the plan, so this category is not just ‘coping’)

• **Outcomes**: identify what the performer wants to achieve following the two categories of behaviour, such as feeling energetic, lively and powerful after a warm-up.

An excerpt from a modified version of the planning sheet is shown in Table 23.1 for a swimmer. In this...
case activities were separated simply between mental and physical and the concept of ‘Outcomes’ was illustrated through bold, italicized statements in the mental activity column. Note that these statements were performer-generated so helped with self-talk content (see later in this chapter). Using a systematic approach to planning ensures that the performer is absolutely clear in their own mind what it is they want to achieve and are able to determine if it has been achieved, or if additional action/coping is required if it hasn’t.

**Timelines and segmentation**

One approach that can be used for an individualized plan is to consider various time phases in the period prior to a performance event and plan specific activities for each of the periods with increasing detail as the time to performance decreases (Fig. 23.2).

Constructing timelines for planning is a useful exercise because it enables performer and practitioner to create and develop an overview and as a result answer the key question of what needs to be
planned for. The idea of increasing detail towards the performance itself is nicely demonstrated by the idea of performance segmentation recommended by Rushall & Potgieter (1987). They emphasize the benefits of segmentation for complicated and extended events such as endurance running. However even short events such as a long jump run-up are effectively segmented in terms both of technical issues in training and also of the psychological benefits of orientating attention to what needs to be done in performance. An example of a segmented performance plan is shown below for a 200 m butterfly swimmer in a long course event (50 m pool) (Fig. 23.3). Each segment in the plan is linked to key instructional information, including technical (long stroke), tactical (hold back), mental (relaxed) and physical (breathe) components. The instructional information is also grouped under mnemonic terms (eagle, dolphin, wind-up, etc.), some of which utilize evocative content to convey the essence of...
performance in each segment. The mnemonic terms help recall, contribute to the information and provide a means of running through the race plan in short burst form. This could be usefully employed, for example, after a false start.

This plan, represented here just as the athlete drew it, shows the largest segment towards the start of the race and progressively smaller segments as the race concludes. The plan is also consistent with the idea of intensification (Rushall & Potgieter 1987) designed to offset fatigue and in this instance pain/discomfort. In essence the intensification principle suggests that performers work mentally harder, utilizing more instructional and motivational self-talk, mood words and images and with more frequent changes between these, as fatigue and other factors detrimental to performance increase.

A segmented performance plan is likely to assist performers in several ways. First, it gives them a clear sense of control about what they should be doing at any stage. It enables them to attend to task relevant instruction but phrased in such a way as to avoid the issues of exerting too much control that was outlined in the preceding chapter on attention and later in the section of this chapter on Self-talk. Developing a performance plan directly feeds into the development...
of the content of self-talk. While a performance plan helps to direct attention, it simultaneously helps to avoid the potential for a performer to become overly anxious. Keeping performers mentally busy and in control are fundamental to avoiding anxiety in performance situations. The performance plan also offers one further benefit, which we will return to later in this chapter: a focused, preplanned structure for evaluating performance.

In summary, planning is an essential component of performance. For most performers there is too much effort and investment at stake to risk getting it wrong on the day. Good planning not only reduces mistakes, it assists in creating the best opportunity for ideal mental and physical set-up. But even a realistic ideal will not match reality and performers must be prepared for quick adaptation of a plan to get the critical elements addressed and get to the ready to perform stage in as good a state as possible. To this end spending some time on contingency planning – what-ifs – helps performers make good decisions about how to react to the need for change. Often those charged with preparing performers will see advantages in extending this so that performers are presented with unexpected difficulties to overcome so that they learn directly how to react in such a way as to minimize any disadvantage to preparation. It is important that performers do not become seduced by the goal of getting or, worse, needing everything to be perfect in order to be able to perform. Frequently delays occur in performance and these can be countered partly by using filler activities (e.g. stretching, mental rehearsal, music, puzzles) that can be easily deployed to occupy these time periods. Filler activities need to be combined with rapid refocusing of attention. The race plan above could be used for a global mental rehearsal and performance routines discussed in the following sections provide sequenced

<table>
<thead>
<tr>
<th>Time</th>
<th>Physical activity</th>
<th>Mental activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>6:00am</td>
<td>Wake-up call, phone</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short walk and stretch</td>
<td>Loosen off from sleep</td>
</tr>
<tr>
<td></td>
<td>Get up, shave, dry off, keep hydrated (0.5 L)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Check kit and add water bottle</td>
<td>Use checklist to ensure I’ve got everything I need.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Preparation is complete</td>
</tr>
<tr>
<td></td>
<td>Breakfast (4 x OJ, cereals, toast/rolls + 0.25 L water)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sit @ table (or outside), read paper if available + 0.25 L</td>
<td>Entertain self with easy chat or read</td>
</tr>
<tr>
<td></td>
<td>Sit at ‘meeting point’</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Full plan included detailed warm-up and stretching sessions, plus diversion activities, at this point</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Watch swimming with the rest. Keep hydrated and loose</td>
<td>Feel loose and ready</td>
</tr>
<tr>
<td></td>
<td>Take a walk (outside?) keep water bottle with me</td>
<td>Feel calm</td>
</tr>
<tr>
<td></td>
<td>Pick up kit go to change into race kit. Hat + goggles in pocket</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Go back and put bag down. Speak to coach</td>
<td>‘Got everything I need to race’</td>
</tr>
</tbody>
</table>

**Table 23.1 Planning sheet for swimmer day of race holding room**

**Fig. 23.2** Planning activity can use time phases prior to performance as a structure.

**Fig. 23.2** Planning activity can use time phases prior to performance as a structure.
approach to focusing attention to a specific skill or performance component. Identifying filler activities with quick refocusing strategies and using these in practice, and in low level performance situations, is necessary for performers to help keep their heads under pressure.

**Performance routines**

Having considered planning and preparation strategies for performers to adopt in the build-up to an important event, we are now going to focus on a technique that can be used immediately prior to, and during, performance. The primary aim of a performance routine is to help the performer attain an optimal internal state in order to realize maximal potential. To meet this goal, a routine may encompass a number of specific techniques designed to self-regulate arousal, thoughts, performance expectancy and attentional focus. A routine can therefore act as a cocoon against the adverse effects of pressure, as, by concentrating on each step of the routine, performers learn to focus only on what they can control. The concept of ‘control’ is absolutely critical to what we are trying to achieve and we examine various ways to maintain control throughout this chapter.

Performance routines have been mainly linked with self-paced tasks, where performers tend to employ a systematic, routinized sequence of behaviours and movements prior to execution of the skill. In this way they are often termed preperformance routines, and are a key component of a psychological skills intervention in such tasks (e.g. Boutcher & Rotella 1987). However, while performance routines are generally discussed in relation to self-paced tasks, any performer interested in achieving an optimal performance state can benefit from such a strategy. First it is important to start with the ‘end in mind’. How does the performer want to feel just before and during performance? This requires some detective work to determine exactly what the optimal internal state consists of before developing strategies to help achieve it. The detective work is based on getting answers to key questions such as: What is going through the performer’s mind (thoughts and images) and how do they feel (arousal level and emotions) when performing at their best? This can be considered as an extension to the approach adopted by Hanin to determine an individual’s zone of optimal functioning, discussed in Chapter 22.

As a demonstration, consider a dancer who has determined that a relaxed, confident state underpins her best performances. She can either (a) hope that on the day she feels confident and relaxed, and if not, she can reflect that it just ‘didn’t happen for her today’ or (b) take control and develop a series of self-statements, images and arousal regulation techniques, fine-tuned during practice and directed at helping her feel confident and relaxed. This example also highlights the importance of the performer taking responsibility for the aspects of performance that they can control, including their preperformance state. There may be occasions when an optimal state seems to just happen, and on other occasions it may be difficult to achieve (particularly if the pressure is intense). However, to establish an optimal performance state on a consistent basis, a performance routine is a likely prerequisite.

**A five-step strategy to an optimal performance state**

Although other similar routines are discussed in the literature (e.g. the Nebraska 3Rs: Ready, Respond, Refocus (Ravizza & Osborne 1991)), we are going to adopt Singer’s Five Step Strategy (Singer 1988, 2000)
as the basis for a flexible performance routine that can be applied across performance domains. The five-step strategy has been shown to facilitate learning and performance in a number of laboratory and field studies (Singer 2000, 2002), and focuses on creating the conditions for a ‘just do it’ performance state. The five steps are:

1. **Readying**: Obtain an optimal physical and mental set
2. **Imaging**: Mentally picture a successful technique and outcome
3. **Focusing**: Concentrate on one relevant external cue
4. **Executing**: ‘Just do it’
5. **Evaluating**: Review effectiveness and adjust next time if necessary.

The first step is ‘readying’ and implies obtaining not only an optimal positioning of the body for the task but also an optimal mental state (attitudes and emotions). This may include using self-talk and arousal adjustment techniques to maintain emotional control and high confidence (see relevant sections in this chapter). This step sets the foundation for the rest of the routine and basically helps the performer ensure that they are physically and mentally in the right ‘place’. The second step, ‘imaging’, reflects the importance of providing a picture and feeling of what successful completion of the task would be like. The third step, ‘focusing attention’, reminds the performer to focus on a relevant external cue or thought; while the fourth step, ‘executing’, reflects the importance of quieting the mind so that you can ‘just do it’. Singer proposes that a final step, ‘evaluation’, allows the performer to evaluate the quality of execution, outcome achieved and the previous four steps of the routine, if time permits.

Singer’s strategy was initially developed to help the learning of motor skills, as opposed to helping maintain performance in pressure settings. The five steps were intended as an instructional approach to distract learners from their own movements so that they could more quickly achieve the ‘non-conscious’ performance state associated with expert performance. However, as Masters (1992; Ch. 13 of this book) has suggested that a focus on the control of movement may also underlie choking under pressure, we argue that the five-step strategy may also provide a useful structure for skill execution in the performance environment. In order to be more flexible to the needs of expert performers we suggest that the rigid, sequential structure may be modified slightly to allow a performer to (1) prepare an optimal performance set, (2) execute in a non-conscious manner and (3) review and evaluate performance to provide feedback for subsequent attempts. A modified performance routine for pressure situations is illustrated in Figure 23.4.

Figure 23.4 highlights three main phases of a performance routine: preparation, performance and review. The ‘preparation’ phase includes both the readying and imaging steps of Singer’s strategy and reflects the fact that imaging may be used alongside other techniques to assist with mental ‘readying’. The order in which these steps are incorporated into the routine can be flexible, so long as they help the performer feel ready to commit to entering the ‘performance’ phase. As the focusing step impacts directly on performance (see the discussion below) and can help create the ‘quiet mind’ associated with unconscious execution, we have linked steps 3 and 4 together as a ‘quiet’ period where detailed technical or strategic thoughts should be minimized. Performance (step 4) should occur non-consciously and as instinctively as possible, so, if a performer has any doubts, the time to ‘pull out’ and ‘re-prepare’ should be at step 3; rather than reflecting on the error in step 5. Evaluating performance (the ‘review’ phase; step 5) is a critical element of continued improvement (see below). However, in-event it is important that this postperformance element of the routine helps the performer refocus and not dwell on any errors made (i.e. ‘draw a line’ under past performance).

**Consistency is key: but consistency in what?**

A key principle of performance routines is that, if the performer is consistent in thoughts and behaviours during performance, the performance itself will also be more consistent. However, it is important to note that it is the mental state just prior to and during performance that should be consistent, not specifically the behaviours linked to the routine. The behaviours and associated mental activity may need to be used flexibly depending on the initial mental state of the performer and the degree to which this differs from the ideal performance state. If a performer is already on a hot streak, he may not need to do much to get into an ideal state, but following a few mistakes doubts will occur and so obtaining an ideal state may be more difficult.
For example, consider a golfer who usually 'waggles' his club three times prior to each shot (physical readying). He may use the cue words ‘relax’ (emotional readying), ‘smooth’ (a specific swing thought) and ‘focus’ (to direct focus to back of ball only) on each waggle. If, because of the demands of the situation, he still has doubts before he initiates his swing, it makes little sense to make the shot anyway, just because that is what the routine ‘demands’ should happen. The purpose of using a routine is to maintain control under pressure and so it would be more constructive to take one more waggle with a re-affirming thought or image, or perhaps even step back and repeat the whole routine (Fig. 23.4). The ability to consistently control our performance mental state is the goal we are seeking, not the ability to ‘blindly’ follow a set routine, or to run through a physically well choreographed set of movements while the brain races uncontrollably.

This flexible application may seem a little counterintuitive if performance routines are meant to be the same in different settings and help to make high-pressure performance ‘feel’ the same as a training environment. In reality it is difficult to isolate the behaviour of the performer from the environment and context and even elite performers appear to adjust their routines slightly depending on the situation. As Aidan Moran highlighted in Chapter 22, the case study by Jackson & Baker (2001) investigating the consistency of the pre-kick routine of Neil Jenkins (at the time the world’s leading point scorer in international rugby) demonstrated that he took longer on more difficult or more pressurized kicks. (These differences actually parallel similar patterns in physiological concomitants, such as heart rate deceleration.) Performers need to develop a consistent routine but also to recognize when a degree of flexibility is required to reach an optimal performance state.

Having discussed why a performance routine might be useful, we will now discuss the various techniques that might be adopted to help a performer maintain control of their performance state, starting with self-talk.

**Self-talk**

We spend a lot of time talking to ourselves, yet much of the time we are not aware of the existence of this internal dialogue, let alone its content. However, as there are strong links between our thoughts, our emotions and ultimately our actions, it is important that we regulate the information we provide to ourselves in the performance arena, via our self-talk. A colleague refers to this process as ‘TEA-time’ (Thoughts – Emotions – Actions; Moore 2004) and uses the phrase as a reminder to performers to check that their self-talk is constructive and likely to lead to an optimal performance state. Negative intrusions related to performance pressures may not feel voluntary, but performers can voluntarily do something to control these intrusions. It is necessary to learn to take control of thought processes and use self-talk

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**Fig. 23.4** A flexible performance routine. Adapted, with permission, from R.N. Singer, 2002, Preperformance states, routines and automacity: What does it take to realize expertise in self-paced events? *Journal of Sport and Exercise Psychology* 24(4): 368.
appropriately to maximize the chance of achieving consistent and optimal performance; in short, performers need to take responsibility for TEA-time.

Self-talk has been defined as the ‘internal dialogue in which individuals interpret feelings and perceptions, regulate and change evaluations and cognitions, and give themselves instruction and reinforcement’ (Hackfort & Schwenkmezger 1993, p. 355). It has been called the key to cognitive control, and indeed the promotion of appropriate self-talk is commonly employed as a cognitive intervention in applied performance psychology (e.g. Zinsser et al 2006). However, there has been little systematic research in the area, and relatively little is known about the content of performers’ self-talk (what they say), let alone where, when and why they use it (The ‘4Ws’ of self-talk; Hardy et al 2005). As we are going to focus on the use of self-talk as part of a performance routine (where) in pressure settings (when), we will begin by exploring ‘what’ the content of self talk might be and ‘why’ performers use it.

‘What were they thinking?’ – the content of self-talk

By far the most studied aspect of self-talk is the nature of the content; specifically, whether it is positive or negative (Hardy 2006). The general consensus amongst psychology consultants is that performers should adopt positive as opposed to negative self-talk (e.g. Zinsser et al 2006). This view stems, at least in part, from cognitive–behavioural therapy and the assumption that emotional problems result from maladaptive (negative) thought patterns (e.g. Beck 1976). The belief that positive, rather than negative, self-talk enhances performance has led to the implementation of a number of cognitive–behavioural techniques in the performance domain, namely thought stopping, cognitive restructuring and countering (see Zinsser et al 2006 for a detailed discussion of the use of cognitive–behavioural techniques in peak performance psychology).

So why should positive rather than negative self-talk assist performance? Positive self-talk may enhance performance through increases in confidence and anxiety control, whereas negative self-talk has been considered as being inappropriate, anxiety producing and counterproductive (Hatzigeorgiadis et al 2004). When examining the research findings relating to the content of self-talk, however, a more complex picture develops, with positive and negative self-talk both associated with both good and poor performance. For example, a recent study by Hamilton et al (2007) investigated the effect of positive and negative self-talk on performance in a cycling ergometer task. The results indicated that both forms of self-talk led to improved performance, in terms of total work completed in 20 minutes, compared to baseline conditions. Furthermore, in a study examining the self-talk of high-board divers, Highton & Bennett (1983) found that elite divers actually reported using less positive self-talk than their non-elite counterparts.

Although it must be acknowledged that reviewing research into self-talk raises methodological concerns relating to different experimental designs and the susceptibility of performers to have biased or inaccurate recall, a number of reasons for these equivocal findings can be proposed. First, negative self-talk may only be harmful to the performance of certain individuals, since self-talk is a uniquely personal experience. The second reason is related to the function of self-talk and requires us to examine our second ‘W’, namely ‘why’ performers use self-talk.

Why do performers use self-talk?

Hackfort & Schwenkmezger’s definition of self-talk highlights two main reasons why it might be used: instructional and motivational functions. Instructional self-talk is used by performers to help them both learn and execute individual skills and strategies. Instructional self-talk has long been proposed as a useful strategy in performance settings to focus attention on key aspects of performance (see Ch. 22). Self-talk helps athletes stay focused, not dwell on past errors, and remain in the present. Motivational self-talk, on the other hand, can be used in a general sense to maintain or increase drive and effort, to regulate arousal or to set an ideal mental set (in terms of mental toughness, confidence and focus).

The type of performance being undertaken will obviously have an influence on which type of self-talk is likely to be of most benefit. For example, research by Hatzigeorgiadis et al (2004) and Theodorakis et al (2000) found that the performance of motor tasks, requiring skill, timing and accuracy was enhanced to a greater extent by instructional self-talk (focusing on technical aspects of performance), than motivational self-talk. A purely endurance task, for example, may benefit more from motivational self-talk.

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So why should positive rather than negative self-talk assist performance? Positive self-talk may enhance performance through increases in confidence and anxiety control, whereas negative self-talk has been considered as being inappropriate, anxiety producing and counterproductive (Hatzigeorgiadis et al 2004). When examining the research findings relating to the content of self-talk, however, a more complex picture develops, with positive and negative self-talk both associated with both good and poor performance. For example, a recent study by Hamilton et al (2007) investigated the effect of positive and negative self-talk on performance in a cycling ergometer task. The results indicated that both forms of self-talk led to improved performance, in terms of total work completed in 20 minutes, compared to baseline conditions. Furthermore, in a study examining the self-talk of high-board divers, Highton & Bennett (1983) found that elite divers actually reported using less positive self-talk than their non-elite counterparts.

Although it must be acknowledged that reviewing research into self-talk raises methodological concerns relating to different experimental designs and the susceptibility of performers to have biased or inaccurate recall, a number of reasons for these equivocal findings can be proposed. First, negative self-talk may only be harmful to the performance of certain individuals, since self-talk is a uniquely personal experience. The second reason is related to the function of self-talk and requires us to examine our second ‘W’, namely ‘why’ performers use self-talk.
designed to maintain effort under extreme physiological demands. However, practitioners should be aware that it is an oversimplification to suggest that performers would not use both forms of self-talk, especially in competition or performance settings where both an ideal mental set (through motivational self-talk) and attention to suitable targets or strategies (through instructional self-talk) are required. Below is an example of such combination self-talk use, provided by an elite wrestler.

With everything that I’m thinking before the match – instead of thinking about everything else negative – I’m saying ‘OK, what you gotta do is go out, you gotta move, you gotta get to the “corner”, you gotta stay on this guy for six minutes, go hard, ’telling myself, ’I win’ out loud so my subconscious gets it. Tell myself to win at all costs.

Eklund et al 1993, p. 44

Negative self-talk, negative performance?

While performance psychologists generally suggest that self-talk should be worded positively (e.g. Hardy et al 1996), this may depend very much on the purpose of the self-talk. Perhaps instructional self-talk should be worded in a positive manner in order to direct the performer’s attention to the important cues and to avoid the potential for negative, ironic processing effects (Janelle 1999 and Ch. 22). Therefore a golfer should phrase his pre-shot self-talk as ‘Hit it down the middle’, as opposed to ‘Don’t hit it in the water’. However, as discussed by Hamilton et al (2007), if the self-talk has a motivational purpose, it may not matter whether the phrasing is positive or negative. What is more important is the individual’s preference for the type of self-statement they want to use and their interpretation of the content. For example, an endurance runner may find it more motivational to say ‘Don’t give up!’ than ‘Keep going! Stick at it!’

Although we will examine the practicalities of self-talk interventions in more detail later, it is worth taking stock of the discussion to date from a performer and practitioner viewpoint. It would appear from the research presented that positive content is generally productive in nature, so it is the safe option to ensure that self-talk has a positive impact. If a performer feels that negative self-talk is more motivational to them personally, then it is appropriate to use it. If instructional self-talk is required, be aware of the risks (e.g. ironic processing effects) of adopting negatively phrased self-statements. We can summarize our discussion of the ‘what’ and ‘why’ of self-talk in Figure 23.5.

Fig. 23.5 • Types of self-talk: The vertical axis represents the ‘what’ and the vertical axis the ‘why’ of self-talk use.

Prevention, cure or enhancement?

Much of the advice from performance psychologists with relation to self-talk interventions follows a similar theme; based on cognitive behavioural techniques (e.g. Zinsser et al 2006). First, it is important to identify self-defeating or irrational self-talk, then try and rationalize the thought processes, before finally replacing the negative thoughts with more productive ones. In this way, performers learn to take control of their thoughts with the positive impact this is likely to have on subsequent emotions and actions.

While this is a useful technique to apply in performance settings, it reflects a ‘cure’ as opposed to ‘prevention’ (or even ‘enhancement’) strategy. In the performance arena, the aim is not just to limit the negative influence of self-defeating thoughts but to attempt to create optimal mental and emotional states (TEA-time). Performers should therefore develop and fine-tune suitably motivating or instructional ‘trigger’ words or phrases in advance of performance in pressure environments. Because anxiety can make performers focus on what might go wrong (possible negative consequences) rather than on what they should do right now, suitable cues can help performers focus on specific actions that can be performed in the moment – the processes underlying performance.

Hardy et al (1996) report an excellent example of how this focus on process in competition conditions might operate. When skier Tommy Moe was asked...
by the media prior to his Olympic gold medal performance whether he was thinking about winning, he indicated that he certainly wanted to win but had found in the past that when he thought about winning while racing he tightened up and did not perform well. He commented that he skied at his best when he focused on ‘letting his outside ski run’ and keeping his ‘hands out in front’ of himself. This example highlights the importance of focusing on what has to be done (the present moment), not on the desired outcome.

A focus on process

The benefits of using self-talk to provide a task-specific (process) focus in pressure environments are that self-talk is under the performer’s control, can be very flexible and can be applied to any performance setting. In self-paced skills especially, self-talk may take the form of a cue-word or brief phrase directing the performer to attend to a specific aspect of the environment (e.g. ‘Watch the ball’), their technique (e.g. ‘Follow through’), or their mental set in terms of energy or mood (e.g. ‘Blast’, ‘Easy’, ‘Hold on to it’).

In more complex environments (fast-moving team sports, for example) process goals can still be useful, without having to be overly complex or numerous (i.e. you don’t need one for every eventuality). For example, a useful way to continue to maintain focus even when anxious is to continually ask oneself ‘What’s my next job?’ or to focus on the ‘next 3 seconds’. Performers sometimes find it difficult to think about trying to maintain an appropriate focus over a full performance, which might last hours in some cases. However, this sort of process goal allows a performer to break performance down into manageable chunks and keep focused in the present. (See above on segmenting performances.)

There are potentially two concerns with adopting process-oriented self-talk, both of which can be refuted to a degree. The first concern is related to the predictions of the conscious processing hypothesis (Masters 1992), which suggests that skilled performance will deteriorate if performers try to exert conscious control over movements that were previously under automatic control. The mechanism behind this deterioration is the reinvestment in explicit rules about the way in which the skill should be performed (see Ch.13). Explicit rules are a form of verbalizable process goal, so it could be argued that the use of process goals may be counterproductive in pressured environments (e.g. Jackson et al 2006).

However, while a series of instructional cues during the completion of a skill may cause a performer to focus on the step-by-step mechanics of its performance, the use of one holistic cue should actually prevent such reinvestment occurring. For example, while a single holistic instructional cue (e.g. ‘Smooth’) might reflect a focus on the movement pattern being carried out, the focus is not on the step-by-step mechanics of the movement (e.g. head down; left arm straight; weight on back foot; etc.). Under pressure, therefore, a holistic cue may protect the performer from the potentially debilitating effects of reinvestment, as opposed to a situation where reinvestment may occur if no organized self-talk is in place. Again, the use of appropriate, proactive self-talk reflects a strategy of prevention, as opposed to thinking about having to deal with the consequences of reinvestment (cure). (These ideas are also examined by MacPherson et al 2009 and discussed in Ch. 13.)

The second concern refers to the fact that performers reliably report that peak performance states (e.g. flow; Jackson 2000), are characterized by a lack of conscious thought processes. Why, therefore, try to ‘force’ performers to actively think about what they are doing? Well, unfortunately peak performance states are extremely rare, and individuals do tend to think when performing, especially in pressure settings. For this reason it is important to have a ‘Plan B’ if ‘Plan A’ (peak performance) doesn’t work out. It is better to have some strategies planned to help direct attention and mental set in a productive way than discover that you have allowed the situation to affect your performance. The concept of TEA-time is useful here, in that it can act as a reminder that our thought processes are not automatically determined by the situation but that we can have control over them. By proactively managing our self-talk we can influence our emotional state and attentional set, which in turn will impact upon our subsequent performance (i.e. performance enhancement).

However, when performers are on a hot streak or having an amazing performance, it is probably not the time to try and ‘force’ self-talk interventions into the mix – they are not needed. There is no point trying to build confidence through self-talk if a performer is already experiencing peak performance or forcefully directing attention if it is already appropriate. However, helping performers be more consistent is often

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just as important for psychology support as helping performers improve their level of performance. If performers tend to be inconsistent and let the environment impact on their performance levels, then appropriate self-talk may assist in achieving a more consistent starting point for performance. Also, as described by Singer (2002), appropriate self-talk as part of a routine just prior to performance, creates the environment by which an optimal performance state (e.g. flow) is more likely to occur subsequently.

Imagery

The use of motor imagery and observation for enhancing performance through mental practice has been discussed in detail in Chapter 16. However, in this section we want to briefly discuss the way in which performers can use imagery during performance as part of a flexible performance routine (Fig. 23.4). Singer (2002) explicitly included imagery as the second step of his five-step performance routine with the purpose of seeing and feeling the desired result prior to performing. Anecdotal support comes from golfer Tiger Woods, who proclaimed that ‘You have to see the shots and feel them through your hands’ before addressing the ball (Pitt 1998, p. 5).

In a similar fashion to self-talk, performers tend to use imagery for both instructional and motivational purposes. From an instructional viewpoint, imagery can be thought of as mental rehearsal and task-relevant focusing, allowing a performer to get a sense of what the performance might look and feel like (as described by Tiger Woods). From a motivational viewpoint, imagery can be used for arousal regulation (see next section) and also to set an ideal mental set (attention and confidence). As with self-talk, performers are likely to use imagery for both purposes in pressured settings. For example, attaching a positive outcome image to technical mental rehearsal will not only allow the performer to plan the actions to be carried out (instructional) but will create a confident and appropriately focused state (motivational).

Reducing arousal – maintaining composure, regaining control

The ability to relax in pressure environments is often considered to be a key psychological skill for top-level performers, so that they may control their emotional response to these demands (e.g. Hardy et al 1996). While the principle behind this ideal (i.e. controlling responses to stress) may be appropriate, the idea that performers are relaxed during pressure events is unrealistic. In Chapter 22, Moran highlighted the example of Ronan O’Gara, who reflected that his heart rate might be 115 beats a minute in a game compared to the (more relaxed) 90–100 in training. Jonny Wilkinson (2003; England out-half) has been even more graphic in his description of his state of ‘relaxation’: ‘You can actually see your shirt moving over your heart, the way your heart is beating. There’s no way I stand there and kick in a game and I am perfectly relaxed. My heart is beating like mad.’ As both these individuals have performed at the highest level, it can’t be their inability to ‘relax’ under pressure that is holding them back. Neither Jonny nor Ronan may have been able to achieve a relaxed state when performing but they both maintain their composure and sense of control, and this is what the following technique seeks to achieve.
Breathing and breath control

‘Breathing’ may not be a revolutionary psychological technique but the control of breathing depth and rate is an effective (and simple) strategy for dealing with pressure. Again we are back to that word ‘control’, and that is what makes a focus on breathing such a useful intervention for athletes who might be feeling that the demands of a stressful situation are getting to them. A performer who takes a moment ‘out’ to focus on breathing, ensuring it is deep and slow, is one who is regaining control of themselves and their composure. As experienced sport psychologist Ken Ravizza (2002, p. 10) comments, ‘You have to be in control of yourself before you can control your performance... self-control leads to body control, which leads to skill control’. This is why breath control as a means of self-regulation is often a useful first intervention to explore with performers – it allows them to ‘win back’ some control.

Williams & Harris (2006) state that performers who are feeling stressed tend to find their breathing affected in one of two ways: either they hold their breath or they breathe rapidly and shallowly from the upper chest. These changes to the breathing pattern can create even more tension and impairment in performance. Learning to take a deep, slow, complete breath is relatively simple and can even be choreographed into preperformance routines or the performance of certain skills. There are a variety of breathing exercises and techniques, many taken from Eastern martial arts practices, and some of these are outlined by Williams & Harris. However, the underlying principle is the concept of a complete breath, with the inhalation starting with the downward movement of the diaphragm. This pushes the abdomen out and creates a vacuum in the lungs, ensuring that the lungs fill up from the bottom.

To practise a deep complete breath, imagine that your lungs are divided into three parts. First fill up the bottom third with air by pushing the diaphragm down and your abdomen out; fill up the middle third by expanding the chest cavity and raising the rib cage; and finally fill the upper portion by raising the chest and shoulders slightly. The entire breath should progress smoothly and continuously before a pause is taken for several seconds at the end of the inhalation. Then exhale by pulling the abdomen in and lowering the shoulders and chest until all air is forced from the lungs. You should imagine that the lungs are emptying out the bottom, with the upper part emptying first, then the middle, then the bottom third. This point, at the end of the exhalation and before the next inhalation is the quietest moment of the breath and the point where it can be useful to reaffirm the feelings of composure you are trying to achieve (‘centring’). In this way, appropriate, individually developed self-statements and imagery can be used to reinforce the feelings of composure gained from breath control. The performance routine is simply a means of ordering and coordinating these processes to achieve the optimal performance state.

Gaze control

The third step of Singer’s routine relates to focus and, as Moran emphasized in Chapter 22, focused attention is best achieved by selecting one appropriate external cue. Maintaining attention on an external target helps prevent attentional disruption from non-productive (internal) thoughts and emotions. In addition, Vickers (Ch. 14) discussed how emerging research from cognitive and neural science shows a strong relationship between shifts of gaze and shifts of attentional focus, thus helping to provide an explanation for how focus and concentration contributes to physical performance.

Optimal visual attention: the quiet eye

Vickers (1996) identified a critical aspect of performers’ visual attention, the ‘quiet eye’, defined as the final fixation on a target before the initiation of final movement. Theoretically, longer quiet eye periods allow performers an extended duration of processing of target information while minimizing distraction from other environmental cues. Vickers (2007) summarizes a number of studies that show that the quiet eye of elite performers is both earlier and longer than that of non-elite performers and is also longer during successful compared to non-successful performance. For example, during the preparation of an accurate basketball free throw, gaze is directed to a single location on the hoop (usually the front) and the fixation is maintained on that location for an optimal duration (approximately 1 second for this task). While this may seem like a rather obvious strategy to adopt, performers don’t always control their gaze appropriately. Vickers (2007) reported that highly skilled
basketball players tend to use fewer fixations during shots than less skilled performers, and fewer fixations on accurate shots than on inaccurate shots. The area over which the gaze is controlled on the target is also smaller for elite performers. To summarize: when performing successfully, experts focus on one key target and don’t let their gaze ‘wander’ around a number of locations in the vicinity of the target.

While it is one thing to be able to highlight differences in gaze strategy between successful and unsuccessful performance, it is another to demonstrate that gaze control can be improved through appropriate training. Vickers and colleagues have previously demonstrated that the quiet eye can indeed be trained and that such training can contribute to large increases in performance in a number of sports. For example, Harle & Vickers (2001) trained members of an elite basketball team to improve their gaze control during task execution of the free throw, through quiet eye training. Performers were guided to orient their gaze to the hoop as soon as possible and maintain this fixation for about 1 second (by saying ‘Sight... focus’). They were instructed that the stability of the quiet eye on one location was crucial and used self-talk (‘Nothing but net’) and imagery (ball going in to the basket) to assist in the development of a positive mental state.

Effects of pressure

The scientific evidence confirms that pressure can influence attention (see Ch. 22), so this impact should also be reflected in changes in gaze behaviour, such as the quiet eye. Recent research (e.g. Behan & Wilson 2008, Vickers & Williams 2007, Wilson et al 2009) has demonstrated that the quiet eye period can be negatively impacted by increased pressure (i.e. made shorter), and this is associated with reduced performance. Performers tend to react to increased pressure by shortening their quiet eye period and moving their gaze around the target vicinity, rather than keeping it stable. Such a finding might be explained by Eysenck and colleagues’ (2007) attentional control theory, which suggests that anxiety impairs a performer’s ability to maintain goal-directed attention and inhibit distractions (see Wilson 2008).

Behan & Wilson (2008) argued that performance routines should therefore incorporate quiet eye control components to enhance attentional capabilities in stressful environments. By maintaining an effective visual orientation, through controlling the quiet eye, the negative effects of anxiety on performance may be alleviated. First, longer quiet eye periods extend subconscious processing of target information related to optimal performance (Vickers 2007). Second, by focusing externally on a target, rather than on the step-by-step mechanics of the performance, choking due to reinvestment should be prevented (Masters 1992). Third, the work of Wulf and colleagues (e.g. Wulf 2007) suggests that superior performance is linked with an external focus, which, in the case of quiet eye control, is achieved through vision. Finally, Singer (2002) suggests that a longer target fixation period serves primarily as a means of self-regulation to enter and sustain an optimal attentional state for performing. Whichever the mechanism, it is evident that performers should seek to create a quiet focus on a single external target to maintain optimal control and create the conditions for consistent, non-conscious, ‘just do it’ performance execution (step 4 of Singer’s strategy).

Evaluating performance

The final phase of our routine and step 5 of Singer’s strategy (Fig. 23.4) reflects a review process and the evaluation of performance. For performers to learn and develop they need to get accurate feedback on their performances. It is important that this is done relatively soon after performance to (1) maximize the benefits (the association between feedback and the event are more powerful the closer in time they are – an idea referred to by behavioural psychologists as temporal contiguity!) and (2) minimize any detrimental effects where performance outcomes have not been positive. Minimizing detrimental effects can be achieved by identifying positive subcomponents of performance, understanding what can be focused on to enhance future performances and ensuring the time spent reviewing performance is organized and limited so performers can ‘move on’ and prevent too much self-damning introspection. However evaluation can quickly become resented and avoided by performers if it is perceived as a lengthy, burdensome chore; as time when they will receive negative comments and feel slighted, belittled or embarrassed; or as an unfocused waste of time. To counter these problems, Table 23.2 offers some principles to govern performance evaluation.
A key part of the evaluation involves an audit of both preparation and performance plans. This audit can be based on identifying answers to the following questions:

- Did the plan cover everything?
- What was planned but not done? Change required?
- What was done but not planned? Changes required?
- What factors caused main disruption to the plan?

Written plans can be efficiently used in the style of a checklist to complete this audit. While this can be done by a performer independently, evaluation is more effective when completed with, or at least reported back to, a psychologist, performance manager or equivalent to provide the necessary level of challenge and to control over- or underanalysis. In performances involving a large number of performers (corps, team or group) a buddy system or senior players can be used to ensure this takes place across all of the performers involved.

### Table 23.2 Principles for evaluating performance

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<th>Category</th>
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| Performer-centred   | Performers must be instrumentally involved and central to the process by providing and obtaining informative feedback, contributing to decisions about what the focus should be.
|                     | For example, in rugby teams key players may be asked to review specific aspects of the game and isolate examples of good versus bad and relate back to fellow players and coaches key points and training implications. |
| Learning and        | Emphasis must be continually on learning how to improve. It is easy to focus on working out what went wrong and then to fall into the trap of blaming performers for mistakes. This will result in performers feeling defensive, learning less and concentrating on avoiding mistakes in the next performance. |
| development         |                                                                                                                             |
| Cultural norm       | Evaluations should follow every performance, good or bad. All performers and key staff must be expected and encouraged to offer and invite constructive criticism.
|                     | For example, recent involvement with an elite military air display team revealed how central evaluation was to their performance culture. Rank, age and experience presented no barriers and comments were matter-of-fact, carefully considered by the team and remained focused on learning and development without threat of personal rancour. |
| Practical           | Evaluation sessions should be time-efficient (too long and concentration will decrease), easy to complete, focused and well conducted. |
| Process, not results| Evaluations should not be overly influenced by the outcome of performance and should identify what was done well and badly to reinforce the former and change the latter. An overall successful performance could have just as many learning points as an unsuccessful one but it frequently happens that good outcomes are followed by celebrations rather than by evaluation that will help learn how to do it again! |
| Confidential        | Good evaluation is most likely to occur in an environment of trust where performers know that what is discussed does not become public knowledge and is not noted and recorded for other purposes (e.g. selection or contract renewal). Having people sit in on sessions may weaken this confidentiality so only those actively involved as participants in the evaluation process should be present. |

### Performance data

Objective performance data, when it is available, can play a key role in evaluating performance, but the principle ‘Process not results’ must be kept in mind. Performance data is common in the sports domain but it is comparatively rare (and hard to establish) in other performance arenas such as dance or mountaineering. Times, distances, weight are simple performance data that avoid outcome focus through comparison with others, but these can be applied more effectively by zoning performance achievements in relation to preplanned targets. For example, increasing percentages towards a specified level, such as personal best, can offer performers graded levels of evaluation (Satisfactory, Good, Excellent) rather than simply success or failure (Collins & MacPherson 2007). The percentages can be adjusted to reflect other factors such as physical training status or return from injury and this would help performers avoid making unrealistic comparisons with ideals.
Performance data can also be analysed to examine performance aspects such as consistency and variation. The example in Figure 23.6, developed by former world champion co-driver Robert Reid, shows performance data from a 3-day rally and uses the number of seconds per kilometre behind the winner of each stage as the variable of interest. The graph shows the times of the performer (who neither expected nor planned to challenge for a podium place), the average of a target group (selected from the field by performer and manager) and the overall winner of the rally. Using these data the performer was able to identify six specific stages (circled on graph) where his speed deviated from the trend of the comparison group. The absolute speeds were not critical but stages where times were slower while the average speed of the target group was faster became the focus for more in-depth review. The graph also illustrates how it is possible to set targets to develop greater consistency so that, for example, achieving speeds less than 1.2 s/km slower than the stage winner would provide a meaningful goal for the performer. In this rally, five of 14 stages (36%) fell outside this target, so setting graded levels better than this (e.g. as above: Satisfactory, Good, Excellent) could be used to evaluate future performances.

Many performers and teams generate performance data from video analysis completed with stylized software to present potentially large numbers of statistics on performance. Two critical issues with this practice are to ensure that the information provided to performers is (1) limited, to avoid overload, and (2) focused, to ensure that the aspects selected are critical to performance, reflect current training aims and are appropriate to the performer(s) in the specific context. For example a performer required for a given performance to fulfil a specific,
unusual role should not be judged on how well they did other roles that might have conflicting demands with the ones they were assigned to. It is salient to note that some aspects of performance and high-visibility roles are naturally considered more desirable than others and contain inherent reinforcement for success. Performance evaluation can help to redress the balance by focusing on essential but less desirable roles and providing subsequent reward for good performance. For example, in team sport scoring inevitably attracts attention so a professional rugby team made sure evaluation included a focus on defensive tackling to raise the perceived importance and esteem attributed to this crucial task (Richards & Richards 2002).

Performance criteria

In many physical performance domains performance data may not be available or collecting it may be too costly in time, labour and equipment. Furthermore data may not show the performance factors of primary concern to a performer on the basis of their current level, training or performance goals. A simple, practical solution to this is to use performance criteria, an idea developed and introduced to me by Richard L. Cox (personal communication, 2000) to evaluate performance. In this technique criteria are identified, in advance, that are representative of essential behaviours for optimal performance.

All criteria must be clear, observable behaviours that could realistically be assessed by a knowledgeable observer. This means terms like ‘effective’, ‘quickly’, ‘confidently’, which are open to interpretation and or are hard to judge, must not be included. Selected criteria are not intended to provide the basis for the content of self-talk (see Chs 7, 8 and 24). Finally, performance criteria can help to identify future training and performance goals and when used with fellow performers the technique can aid the development of shared understanding (coherence), necessary for interactive performance teams. Performance criteria can be modified as performers develop, and be made appropriate to changing performance situations. In this way they can act as a form of goal setting and, for a team of performers, enhance task cohesion (see Ch. 20). Following performance, with sufficient time lapse to think clearly but not so much as to forget, the performer can rate themselves on how well each criterion was achieved (e.g. scale 1–10). This activity helps to increase self-monitoring and awareness of performance. Ratings can also be obtained from another who observed or could reasonably evaluate the performer. This could be another performer, manager, director or coach. Discussing discrepancies can help to identify future training and performance goals and when used with fellow performers the technique can aid the development of shared understanding (coherence), necessary for interactive performance teams. Performance criteria can be modified as performers develop, and be made appropriate to changing performance situations. In this way they can act as a form of goal setting and, for a team of performers, enhance task cohesion (see Chs 7, 8 and 24). Finally, performance criteria can provide the basis for the content of self-talk (see above), identifying specific task-relevant behaviours for performers to remind themselves of during performance and to maintain or regain attention (see the feedback loop element of Fig. 23.4).

| Table 23.3 The process of refining performance criteria through several stages |
|-----------------|----------------|----------------|
| Initial criteria | Second attempt | Final criteria |
| Effective use of overhead shots; not predictable; challenge opponent | Variety of shots from overhead | Overhead shot placement on at least three different zones per match |

Putting it together
Video-based evaluation

While performance criteria retain a strong behavioural basis to allow rating by others, it is clear that, for psychologists especially, mental activity is also important to review. One technique that can be employed to achieve this is video-based, stimulated recall (Trudel & Gibson 1994). Video footage can prompt thorough and detailed recall of mental activity prior to and during critical performance episodes. Being able to pause the playback enables the performer to explain decision making that might occur too rapidly to explain in real time. This process can be used to evaluate the accuracy of planned preperformance routines, discussed earlier in this chapter, and to make necessary modifications or suggest additional practice and training requirements.

It is not uncommon for video of performance to be given to performers without structure for analysis or any specific guidance. This can be a waste, as Bandura (1986, p. 51) noted that ‘people cannot learn much by observation unless they attend to accurately perceive relevant aspects’. Unless the performer is very capable and knows what to look out for (can self-analyse and self-coach), providing video footage may be less effective than simply reminding performers of basic cues for a skill or movement. Unpublished preliminary investigative work by Adams (2006) showed that the flip-turn of experienced freestyle swimmers consistently improved when evaluation combined video replay with coach-identified attentional cues for future turns. Less effective was coach-identified attentional cues without video, and least effective was the performer just watching the video of their performance. The implication is that video alone has potentially the least benefit for enhancing performance yet may represent the biggest cost in time (to make and watch) and in technology. Although it is may seem to provide a tempting feedback solution to those working with performers (especially larger groups and teams), using video alone needs to be considered very carefully in terms of both effectiveness and efficiency.

Cycle of performance development

Whatever option is chosen to evaluate performance, it should be stressed that evaluation is critical for performers to learn, develop and progress. Plans, performance data, performance criteria and video-based evaluations have all been outlined within this section. In addition to this verbal debriefs and checklists can be used to good effect and easily conform to the principles outlined. Evaluation provides the essential link between performance and training/practice. Similarly planning and preparation occur as an output of good evaluations and in preparation for performance. These combine into a cycle of learning, development and enhanced performance (Fig. 23.7).

Bringing it all together: be ‘safe’ under pressure

Throughout this chapter, various approaches and mental skills have been described to help set an environment for the consistent attainment of optimal performance. There is very clear overlap in many of these areas: evaluation through performance criteria assists in the construction of self talk; self-talk is a component of performance routines and routines may use focusing through gaze control. This overlap is understandable and to be expected because the single purpose of these skills is to maintain and enhance performance and so they converge towards this aim. This is particularly well illustrated in the case of performance routines, where a combination of techniques (breath control, self-talk and imagery) may be integrated into the ‘Prepare’ phase of the routine (steps 1 and 2 of Singer’s strategy) in a manner that ‘works’ best for the individual concerned.

While the content is individual-specific it might be useful to consider the mnemonic SAFE as a reminder of the key elements of using a routine to maintain control under pressure:

- S: Set an optimal performance state (through breath control, self-talk and imagining techniques)
- A: Adjust routine if necessary (if optimal state has not been reached by ‘standard’ routine)
• **F: Focus** with a quiet eye (direct attention to key external target)
• **E: Execute** with a quiet mind (let conscious control go – ‘just do it!’)

Ultimately, the skills and approaches are tools that can be used in various ways and combinations to help performers meet the demands and pressures of achieving optimal performances.

**Individual specificity: one size does not fit all**

One further important message is to emphasize the need to ensure that psychological tools are applied appropriately to individuals. By way of an example; if a performer has a non-verbal cognitive preference, the practitioner’s time would be better spent constructing an intervention strategy with an emphasis on imagery, as opposed to self-talk. Similarly, if the performer struggles to produce vivid and controllable images, then verbalized cue words may be more appropriate. This point reflects the importance of working with a performer to develop the most appropriate intervention to deal with the specific concerns and preferences they may have, not rehashing something that worked well previously with another performer.

The importance of a focus on individualized development was also raised in our discussion of negatively phrased motivational self-talk. We highlighted how the interpretation of the content of self-talk may be more important than the content itself (i.e. is it positive or negative?). It may be that, for some individuals, negative self-talk is not self-defeating but is instead interpreted as being challenging and motivational in nature. It is therefore important to consider exactly what the performer is trying to gain from their use of self-talk (the why), rather than simply focusing on the content (the what). By trying to force a performer to adopt positively worded self-statements, because that is what ‘the research says’, you may limit the motivational impact of the technique. This may not only limit performance but will also reduce the performer’s trust in your understanding of their individualized needs.

We will finish this section with a final example (and warning) of why performance psychologists need to be careful not to try and force a specific psychological technique upon a performer simply because other psychologists or performers have found it to be useful. A news item in *The Psychologist* (Anonymous 2003) discussed the case of a seven-times world bowling champion and twice Commonwealth gold medallist who refused to attend national squad relaxation sessions run by the team psychologist. She was subsequently dropped from the team for failing to attend scheduled training sessions. This sorry story provides a few lessons for all performance consultants in terms of individualizing psychological techniques. Should we not be learning from such performers who have achieved success at the highest levels, not alienating them? Why should we think that group relaxation sessions are going to be relevant and effective for everyone in a squad? As the (female) bowler pithily commented, ‘If I am going to lie on my back for an hour, I expect to be enjoying myself!’.

**Fig 23.8**

It’s great when everything works. Graeme Randall celebrates winning Gold at the 1999 World Championships. © judosports.com and David Finch Photographs, with thanks.
Conclusion

All the techniques discussed in this chapter require practice in training before being unleashed in the pressure environment. Performers would not try out a new technical skill on the day of their most important performance without having drilled it in practice first. The same is true for mental skills, so, for example, a performance routine requires similar attention and fine-tuning in the practice arena and in lower-level performance opportunities. In this way minor adjustments and improvements can be made to the techniques adopted, as well as the flow between these individual techniques making up the performance routine. Such practice will also lead to a level of automatization, whereby the routine is automatically 'switched on' each time the performer is in a pressure situation. As we discussed earlier in the chapter, however, we need to leave some room for adjustments to the routine, to account for occasions when the optimal performance mental state does not occur following the 'standard' routine. 'What if?' planning may be a useful strategy to prepare for what steps should be taken when this situation does arise, so that the best chance for optimal performance is provided. In this way, the performer attempts to maintain control of the situation, even when external events may be raging out of control.

One final point, which may seem trite but is important in terms of our mantra of control being critical, is that it is important to maintain perspective in the face of pressure. Most performers choose to be there and enjoy the buzz of performing. By putting yourself out there for evaluation it is always possible that your performance does not match your aspirations. However, after a disappointing performance, you can control how you respond to that disappointment. Michael Johnson reflects the importance of perspective, having just failed to qualify for the 1992 Olympic 200 m final when he was favourite to win: ‘Sure it was important to me, but to who else? The sun will be out tomorrow and the stars and the moon will be out tonight. It was only a race.’ Guess what happened in 1996?

References


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SECTION FOUR
Performance


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