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Self-talk and endurance performance

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Abstract

This chapter outlines theoretical and research literature on self-talk in the context of endurance sports. Three clusters of self-talk research on endurance sports are overviewed: descriptive research, research on self-talk antecedents, and research on the effects of self-talk. In particular, we show that learning to use self-talk can benefit endurance performance. We then suggest priorities for future research on self-talk in the context of endurance sports. Finally, research on the effects of self-talk is used to provide practical guidance on learning to use self-talk to benefit performance results.

“I want to quit” # “Keep going, you can do this”

“My legs are aching” # “I’m almost there”

“It’s too hot” # “There’s a water station approaching”

“That’s it, I’m done” # “It will get easier soon”

“I can’t take it anymore” # “I will make it”

Endurance events are unique. Athletes are ‘alone’ fighting against the limits of their body and their mind. The way is long, the time passes slowly, and the mind can’t snooze; there is a lot to think about, there is plenty of time to doubt oneself and ruminate but also to reflect upon and praise… it’s a mind game. The mind is the key and it should be prepared to ‘talk’ all the right things to get you through the event.

> “One of my favourites is simple, but effective. It's hard to think too deeply when I'm going to the well, so I just tell myself over and over again: ‘You're doing great.’” (Ryan Hall, U.S. record holder in the half marathon)

> “One of my favourite mantras is ‘Tough times don't last, but tough people do.’ There can be highs and lows in ultras and I like to think of myself as tough, which is why I like this saying.” (Ellie Greenwood, two-time IAU 100km World Champion)

> “If someone is on my heels or just ahead, then I keep repeating in my head, ‘Just keep pushing.’ It stops me from easing off even a little bit so that if I slow or if the terrain gets easier, I kick it up a notch.” (Ian Sharman, holder of the fastest 100-mile trail time in the U.S.)

(Havey, n.d.)

Self-talk refers to what people say to themselves either silently in their head or aloud, automatically or strategically, to stimulate, direct, react, and evaluate events and actions (Hatzigeorgiadis, Zourbanos, Latinjak, & Theodorakis, 2014). This description first makes a distinction between automatic and strategic self-talk, and then identifies potential functions or purposes of self-talk. Automatic self-talk refers to those things that people say to themselves that are not planned or prepared. Its content can be positive (e.g., "I can do it"), negative (e.g., "I'm not in the mood for this"), or neutral in nature (e.g., "What's my pace?"). Such automatic self-talk can serve to provide direction and stimulate action (e.g., "Keep the pace") or react (e.g., "Don't let her go") and evaluate (e.g., "Screw-up"). In contrast, strategic self-talk refers to use of self-talk that is planned or used in a systematic way to achieve a goal. Strategic self-talk has been categorized depending on its function, mainly as instructional and motivational. Instructional self-talk is used to provide instruction relating to technique or form (e.g., "Pump your arms"), strategy (e.g., "Stay with the pack"), movement qualities (e.g., "Smooth pedalling"), and what to pay attention to (e.g., "Look out for the trail on the right"). Motivational self-talk is used for motivational purposes such as to psych up (e.g., "Let's go!"), maximise effort (e.g., "Give your all!"), build confidence (e.g., "You can and you will"), and achieve a desired feeling state (e.g., "Feeling good") (Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011).

Recent advances in self-talk theorizing have led to new ideas regarding the conceptualization and origins of self-talk. Latinjak, Zourbanos, Lopez-Ros, and Hatzigeorgiadis (2014) distinguished two broad types of self-talk: goal-directed and spontaneous. Goal-directed self-talk refers to statements that are deliberately used to solve a problem or make progress on a

task, and they are used to regulate thoughts, feelings such as emotions, and behaviour. Such self-talk is considered automatic, rather than strategic, because the statements come from the athlete and are not pre-planned. Spontaneous self-talk refers to statements that come to mind unbidden or effortlessly and that are not goal-focused (e.g., "Silly mistake"). In a somewhat similar fashion, Van Raalte, Vincent and Brewer (2016) identified (a) an intuitive type of self-talk, that comes to mind spontaneously, focuses awareness on current experiences, and represents the immediate and emotionally-charged reaction to a situation (e.g., "Damn it, I messed up"), and (b) a rational type of self-talk (e.g., "Relax your shoulders") based on reason, which is emotionally neutral. Although research is scant on these distinctions between types of self-talk in sport settings, they provide fruitful grounds for enhancing understanding of self-talk in sport and endurance activities.

This chapter overviews the research conducted on self-talk in endurance sports, and it identifies priorities for future research. At the end of the chapter, research-informed practical guidance is given on learning to use self-talk to benefit important outcomes such as performance results and satisfaction.

Self-Talk Research

Providing a framework for the study of self-talk, Hardy, Oliver, and Tod (2009) identified three clusters of questions: description, antecedents, and effects of self-talk. Descriptive research describes the qualities of the self-talk, such as its content, frequency, and purpose. Research on the antecedents of self-talk explores personal (e.g., demographic, cultural, or sociopsychological attributes), situational (e.g., importance and difficulty of circumstances, and motivational states), and environmental factors (e.g., coaching behaviour, others' expectancies) that shape and determine people's self-talk. Finally, research on the effects of

self-talk examines the effects of using planned self-talk cues or statements on outcomes such as performance, and it examines the psychological mechanisms that explain why self-talk affects performance (Hatzigeorgiadis et al., 2014).

Descriptive Research

Research on the content of self-talk used by endurance athletes is useful and warranted, to help identify issues to be dealt with and to further develop effective interventions. Few studies have thoroughly described the self-talk used by people before, during, or after endurance exercise. A notable exception (Van Raalte, Morrey, Cornelius, & Brewer, 2015) explored the self-talk of 483 marathon runners ranging in age, experience, and standard. Most of these runners (88%) reported using self-talk during marathons. They engaged in various types of self-talk that included associative self-talk focusing on their bodies (e.g., "My breathing is controlled"), positive (e.g., "You can do it") and negative motivational self-talk (e.g., "Don't be a wimp, this isn't that hard"), incentive self-talk (e.g., "I will be able to eat anything I want"), short-term goal-related self-talk (e.g., "Get to the next mile marker"), dissociative self-talk that served as a distraction (e.g., counting backwards), mantras or repetitive chants (e.g., "Stride, stride, abide, abide"), and spiritual self-talk (e.g., "I'm doing this for cancer patients"). Much of the self-talk was motivational in nature, helping the athletes to continue despite the exertion and pain encountered when performing over a long distance, therefore identifying an important function of self-talk for endurance performance. Across elite and non-elite competitive standards, the most prevalent types of self-talk were associative, positive-motivational, and incentive self-talk. Nevertheless, differences in self-talk prevalence were evident when comparing elite and non-elite marathon runners, with use of associative self-talk more prevalent in elite runners (43% of runners) than non-elite runners (18%). Associative self-talk was similar to instructional self-talk in other types of sport and reflected runners paying

attention to their body and aspects of running such as pace, stride, and form, which are important for performing to their potential (Brick, MacIntyre, & Campbell, 2014). Although it is important that non-elite runners also monitor their pace and form (e.g., so they do not become exhausted before the finish), they may not be motivated by finishing in their fastest time, and focusing on bodily sensations can feel unpleasant and therefore be discouraging.

Other studies have shed light on endurance athletes' use of positive and negative self-talk. Dolan, Houston, and Martin (2011) reported that positive self-talk was the most common mental preparation strategy used during training and in the hour before racing by 401 triathletes. In this study, female triathletes were more likely to use positive self-talk before training (62.4% versus 40.1%) and before racing (56.7% versus 39.6%), compared to males. In addition, in a study with former Olympic cyclists (Kress & Statler, 2007), using positive self-talk was identified as a coping strategy for dealing with exertion pain (e.g., "Hey, I'm trained for this. I've prepared myself. I can get through this. It will get easier soon. Everybody else is suffering too. If I'm suffering, everyone else must be suffering worse"). Further, ultramarathon runners described using self-talk to cope with the demands of events, and particularly referred to the importance of maintaining positive self-talk throughout events, and specifically during difficult moments (Simpson, Post, Young, & Jensen, 2014). With consideration to negative self-talk, thoughts about quitting (e.g., "I already did this before… What am I trying to prove by doing this again?") were common for ultramarathon runners and a source of stress (Holt, Lee, Kim, & Klein, 2014). There was a constant battle between positive and negative thoughts throughout the event and especially during the latter stages. In addition, recreational-level runners, cyclists, and triathletes described a desire to stop or slow down and unhelpful self-talk that was persuading them to not continue, when they neared exhaustion during an event. They also described negative self-talk (e.g., "I'm 30 seconds off what I should

be – disaster", "I've buggered up all that training") when they encountered a range of stressors such as dropping food or a water bottle (McCormick, Meijen, & Marcora, 2018b). In addition, some studies have used a "think aloud" protocol to examine endurance athletes' thought processes generally (i.e., not limited to their self-talk), which sheds light on what their self-talk would likely relate to. In particular, 10 runners who were running seven or more miles reported thoughts relating to their pace and the distance, relating to pain and discomfort, and relating to environmental factors such as geography and weather, admiration for the environment, wildlife, traffic, and other people (Samson, Simpson, Kamphoff, & Langlier, 2017).

Finally, some studies suggest that many endurance athletes are not fully aware of their self-talk or do not use it deliberately (Buman, Omli, Giacobbi, & Brewer, 2008; McCormick, Meijen, & Marcora, 2018a; Schüler & Langens, 2007; Stanley, Lane, Beedie, Friesen, & Devonport, 2012). For example, few runners identified self-talk as a strategy they use to influence their emotions before they run (Stanley et al., 2012). These studies highlight the potential value of self-talk interventions. Interventions could help athletes to become aware of their self-talk and its consequences, and to intentionally use self-talk statements that match the demands of the endurance event.

Self-Talk Antecedents

Research on the antecedents of self-talk attempts to identify factors that shape and determine people's self-talk (Hatzigeorgiadis et al., 2014). There is relatively little research on the antecedents of self-talk within endurance sports. One area of relevant research has examined the effects of exercise intensity and duration on a person's thoughts, particularly their focus of attention. In the endurance literature, two broad focuses of attention have been distinguished. Although there are newer classifications (Brick et al., 2014), *association* traditionally refers to

when exercisers pay attention to bodily sensations such as their heart rate, breathing, temperature, and muscle fatigue, whereas *dissociation* traditionally refers to when exercisers direct their attention away from these sensations that often feel unpleasant (e.g., Morgan & Pollock, 1977). Research in this area (Aitchison et al., 2013; Hutchinson & Tenenbaum, 2007; Tenenbaum & Connolly, 2008) has required participants to perform at different exercise intensities, and to report or categorise their thoughts. These studies show that people report mostly dissociative thoughts at lower intensities, and thoughts become increasingly associative as the exercise intensity and duration increases, particularly as they near exhaustion. Although research in this area has examined performers' thoughts generally, which includes more than their self-talk such as their focus of attention, the methods used do capture self-talk. The results are also suggestive of what a performer's self-talk is likely to relate to. For example, as a person performs close to their maximum level of effort, their self-talk is likely to relate to whole-body feelings (e.g., pain, fatigue, exertion) and command and instruction to specific body parts or whole-body functioning (Aitchison et al., 2013).

Hatzigeorgiadis and Biddle (2008) reported findings of two studies with middle-distance, cross-country runners that explored anxiety and goal-performance discrepancies as antecedents of negative self-talk. In the first study, they found that cognitive (relating to worry) and somatic anxiety (relating to bodily symptoms) experienced 30 minutes before competing were associated with performance worries during performance (e.g., thoughts that they were not going to achieve their goal). Moreover, they found that runners who perceived their pre-competition anxiety as helpful reported less worries during performance, compared to runners who perceived their anxiety as detrimental. In the second study, goal-performance discrepancy was a stronger predictor of negative self-talk than anxiety. Highlighting the importance of

pursuing realistic performance goals, athletes who performed below the standard required to achieve their goal reported more frequent performance worries while performing.

Effects of Self-Talk

Research examining the effects of self-talk typically uses experimental designs to test whether strategically using instructional or motivational cue words or short phrases improves performance. Laboratory studies provide good evidence that motivational self-talk improves endurance performance. Recreationally-active individuals who received a motivational self-talk intervention showed an 18% increase in their cycling time to exhaustion at 80% of their peak power output (a strenuous workload sustainable for approximately 10 minutes), whereas a control group who did not receive the intervention marginally decreased their time to exhaustion (Blanchfield, Hardy, de Morree, Staiano, & Marcora, 2014). In other words, people using motivational self-talk persevered with the strenuous cycling for longer before stopping. The strategic self-talk intervention involved using two statements in the early-to-mid stages of the cycling (e.g., "Feeling good"), and two near exhaustion (e.g., "Push through this"). In another study (Barwood, Corbett, Wagstaff, McVeigh, & Thelwell, 2015), recreationally-active males who used motivational self-talk increased their power output throughout a 10km cycling time trial and improved their performance time by 3.75%, whereas a neutral self-talk group maintained similar power outputs and their time increased by 1.30%. The intervention involved identifying negative self-talk they had used (e.g., "I've worked too hard"), and countering it with positive, motivational statements (e.g., "I can manage my energy until the end"). In a third study (Wallace et al., 2017), trained cyclists and triathletes who used motivational self-talk performed for 39.4% longer when they were cycling at 80% of their peak power output in an environmental chamber that simulated performing in the heat. A control group marginally decreased their time to exhaustion. Finally, in a similar study in hot

conditions (Hatzigeorgiadis et al., 2018), participants cycled at a steady rating of perceived exertion (a "somewhat hard" to "hard" intensity) for 30 minutes. Participants using motivational self-talk produced substantially greater power during the final third of the trial compared to control participants.

Complementing laboratory studies that are characterized by experimental control, but that lack ecological validity (i.e., generalisability to real-life settings), two field studies have been conducted at real endurance events. First, Schüler and Langens (2007) examined the effects of using self-talk during a 'psychological crisis' in a marathon. Such a crisis typically occurs after about 30 kilometres (18.6 miles), and is characterised by strong desire to give up, and thoughts about the benefits of stopping (e.g., resting, relaxing) and the costs of continuing (e.g., unbearable exhaustion). For runners experiencing a big psychological crisis, self-talk statements related to self-encouragement (e.g., "Stay on. Don't give up"), anticipation of positive consequences (e.g., "I will be proud of myself if I can do it"), and self-calming (e.g., "Stay calm and you will do it") were effective at buffering against negative effects of a crisis on performance. Second, McCormick, Meijen, and Marcora (2018a) examined the effects of learning to use motivational self-talk in runners completing a 60-mile, overnight ultramarathon. Although there was no performance benefit, which could be explained by the small sample size and variability in performance times, the participants reported finding the intervention helpful and continued to use it six months after their commitment to the research, particularly during endurance events and to a lesser extent in training.

Studies to date have examined the effects of motivational (rather than instructional) self-talk, which is well suited for increasing and maintaining effort during a physically-demanding endurance task. Instructional self-talk could be valuable for managing other demands of

endurance events, such as paying attention to other competitors or the environment, or monitoring and controlling pace, stride, form, or technique. Future research could fruitfully examine the effects of instructional self-talk interventions in endurance sports.

Self-Talk Mechanisms

Various theories discussed in this book explain ways that self-talk could benefit endurance performance. Theories of emotion regulation (Chapter 5) suggest that self-talk can influence how a person evaluates stressful situations they encounter (e.g., adverse weather, injury, mechanical failure), the emotions they experience (e.g., anxiety, frustration, discouragement), and whether these emotions are helpful or harmful (e.g., whether they increase focus or cause distraction). Self-efficacy theory (Chapter 7) suggests that self-talk, as a type of verbal persuasion, can enhance self-efficacy and consequently improve endurance performance. Motivational self-talk could also increase tolerance of exercise-induced pain (Chapter 3). These mechanisms have received some empirical support in sport research on self-talk (for a review, see Galanis, Hatzigeorgiadis, Zourbanos, & Theodorakis, 2016), but have yet to be examined in endurance research on self-talk.

Empirical evidence does exist for mechanisms described by the psychobiological model of endurance performance (Chapters 1 and 2), in particular in relation to perception of effort. The psychobiological model suggests that self-talk can improve endurance performance by decreasing perception of effort (how effortful, heavy, or strenuous the exercise feels) or increasing potential motivation (the greatest amount of effort that a person would be willing to offer). Perception of effort plays a role in explaining the effect of motivational self-talk on endurance performance. Blanchfield et al. (2014) found that when participants were using motivational self-talk, their perceived effort was lower than it was at the same time during their

baseline performance. In other words, the same workload felt less strenuous. Barwood et al. (2015) and Hatzigeorgiadis et al. (2018) also found support for the role of perceived effort. In both studies, participants who were using motivational self-talk increased their power output (i.e., they were working harder), without perceiving more effort. In contrast, Wallace et al. (2017) did not find that motivational self-talk affected perceived effort. Instead, they found that the eight of nine participants who performed for longer when using motivational self-talk cycled for nearly twice as long (98.6% longer) after reaching a rating of perceived exertion value of 19, which indicates that they are offering their maximal effort or near to it. In other words, using motivational self-talk did not reduce perception of effort, but increased participants' willingness or ability to tolerate near-maximal effort.

Summary

Descriptive research has shed light on the variety of self-talk used by marathon runners and the positive and negative self-talk of other endurance athletes. There is little research specifically on the antecedents of endurance athletes' self-talk, but research has demonstrated that thoughts generally—and seemingly self-talk specifically—become more associative in nature when a person is performing at a higher exercise intensity and as they reach exhaustion. Research on the effects of self-talk demonstrates that strategic use of motivational self-talk improves endurance performance, and perception of effort appears to play an important role.

Directions for Future Research

Several directions are provided in relation to the three clusters of self-talk research. Regarding description and antecedents, we suggest exploring postulations of the new self-talk theoretical models (Latinjak et al., 2014; Van Raalte et al., 2016), particularly how self-talk is

conceptualized within these frameworks as spontaneous/intuitive and goal-directed/rational. Research could explore when, and for what reasons or purposes, endurance athletes experience or use spontaneous or goal-directed self-talk. In addition, they could describe the content of such self-talk in relation to its timing and functions. This research would help identify when and how to intervene to change counterproductive self-talk and promote effective goal-directed self-talk. Preliminary research in non-endurance athletes has provided useful insights (Latinjak et al., 2014).

It is important to theorise and measure potential mechanisms that could explain why self-talk benefits endurance performance (McCormick, Meijen, & Marcora, 2015). Doing so would help us understand how self-talk works, advance our knowledge of the self-talk phenomenon and, importantly, develop additional, effective self-talk interventions. As referred to in the Self-Talk Mechanisms section, research could measure the effects of targeted self-talk interventions on emotions, self-efficacy, perceived pain, and perceived effort.

Research has yet to examine the effects of instructional self-talk on endurance performance. Instructional self-talk could help endurance athletes to pay attention to relevant cues (e.g., their breathing, opponent movements), perform technical aspects (e.g., correct running form or bike-handling technique), apply their race strategy, make pacing or tactical decisions, or manage mental and physical fatigue. For example, recent research has shown that instructional self-talk can help counter the effects of ego depletion, which refers to when energy for mental activity is low and self-control is reduced (Gregersen, Hatzigeorgiadis, Galanis, Comoutos, & Papaioannou, 2017).

With regard to long-term interventions, the new line of goal-directed self-talk interventions introduced by Latinjak and colleagues (2016) warrants attention from an applied perspective. Goal-directed self-talk interventions aim to help athletes to come up with alternative goal-directed self-talk in specific, problematic situations that evoke dysfunctional self-talk, such as internally-focused attention when exhausted. Such interventions—for which the purpose and structure are more thoroughly described by Latinjak et al. (2016)—could be accommodated well within the endurance performance setting.

Finally, verbal or written instructions and self-talk workbooks have been used to deliver self-talk interventions. Researchers could examine the effects of self-talk interventions that are delivered in ecologically-valid formats (e.g., websites, online videos, magazine articles) that are preferable to sub-elite endurance athletes, who may not have access to a psychologist (McCormick, Anstiss, & Lavallee, 2018).

Learning to Use Self-Talk

A useful first step is to notice your self-talk and the effects it has on how you feel. Endurance athletes have been encouraged to listen to their self-talk whilst exercising, to notice their self-talk statements, and to notice their effects. A framework like the below can be used to record these afterwards (from McCormick, Meijen, & Marcora, 2018a).

Self-talk statement	Did this statement have a positive, negative, or no effect on how you felt?	Please pick up to four statements that had the most beneficial effects (✓)
"I've had enough"	Negative	

“Come on, keep going”	Positive	✓

For choosing your own strategic self-talk statements, Hatzigeorgiadis et al. (2014) suggested using an IMPACT approach.

I	**I**dentify what you want to achieve
M	**M**atch self-talk to needs
P	**P**ractice different cues with consistency
A	**A**scertain which cues work best for you
C	**C**reate specific self-talk plans
T	**T**rain self-talk plans to perfection

I*dentify What You Want to Achieve*

Pick self-talk statements based on your needs. Some people may be aiming to enhance their learning by developing new skills, improving their technique, or correcting mistakes. Others may be aiming to enhance their performance by learning how to psych themselves up or cope with exertion and pain. Others may be aiming to have more enjoyable experiences through learning how to cope with stress.

Pick statements based on the demands of the sport too. Although the demands of each sport vary, endurance athletes from a range of sports and events encounter some common demands that self-talk could help them to cope with. They need to persevere despite exertion and pain,

make difficult pacing decisions, and cope with a range of stressful situations (McCormick, Meijen, & Marcora, 2018b).

Match Self-Talk to Needs

As a rule, self-talk statements should be brief (a word or a short phrase), memorable, and purposeful for what you want to achieve. It is also important that they "feel right" for you personally (Van Raalte, Vincent, & Brewer, 2017). The below are examples of instructional and motivational self-talk statements in running (from McCormick, Meijen, & Marcora, 2018a; Miller & Donohue, 2003). Compare these statements with those that you observed yourself using.

Instructional Self-Talk	Motivational Self-Talk
"Pump your arms"	"You're going to dominate today"
"Keep your eyes focused straight ahead"	"This is what you've been training for"
"Run on toes"	"It's time to go to work"
"Drop your shoulders"	"Leave nothing behind"
"High knee lift"	"Come on! Come on! Keep it going!"
"Stick with your plan"	"Smash this!"
"Run through the finish line"	"Keep pushing! You can handle this!"

Consider the following when selecting appropriate types of self-talk (Hatzigeorgiadis et al., 2014):

- Instructional self-talk is useful for focusing or directing attention (e.g., “Watch her going for the overtake”) or controlling technical aspects of a movement (e.g., “Keep your cadence high”).
- Motivational self-talk is useful for psyching up (e.g., “Let’s go”), building confidence (e.g., “Come on, you can do this!”), increasing work rate (e.g., “Come on, let’s push on”), or maximizing effort (e.g., “Give it all you’ve got and leave nothing behind”).
- Instructional self-talk is useful in the early stages of learning, as verbal cues could help you pay attention to the right things and provide useful technical (e.g., “Long strides”) or tactical instruction (e.g., “Run your own race”). Motivational self-talk is useful when performing well-learned tasks that you can perform automatically.

What self-talk statements could be useful in the following situations?

When would self-talk be helpful?	What do you want to achieve?	What statements could help?
Beginning of performance	Example: Set my own pace despite other competitors.	“Run your own race”
Middle of performance	Example: Maintain good running form.	“Low and loose shoulders”

End of performance	Example: Persevere through high exertion.	"The end's in sight – One last push!"
When having thoughts about withdrawing effort	Example: Continue running, rather than stopping.	"Come on – You can push through this"
After encountering adversity	Example: Cope with getting lost.	"Take your time. There's plenty of time before the cut-off"

***P**ractice Different Cues with Consistency*

The chosen list of self-talk statements should be practised extensively and systematically during training. You can complete something like the below, print it off, and use it to remind yourself of key points before or during training (from McCormick, Meijen, & Marcora, 2018a).

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My self-talk statements are:

1.

2.

3.

4.

Remember:

1. Use these statements often.
2. Use these and similar statements to counter unproductive thoughts.
3. Use these and similar statements during critical moments (e.g., something goes wrong).
4. When might these statements be helpful?

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Ascertain Which Cues Work Best for You

Through practice, you can identify statements that work best for achieving your desired goals and gradually refine your self-talk statements. You can complete logs like the below after a training session where self-talk was practised.

List the self-talk statements that you used

Which were particularly helpful?

How did these statements help (e.g., when did they help, what did they help you with)?

List the self-talk statements that were unhelpful

If you found a statement unhelpful, consider replacing it and practising a different statement instead next time.

List the self-talk statements that you intend to use next time

__C__reate Specific Self-Talk Plans

Statements can be organised so that a complete self-talk plan is developed for training or an event. This plan could involve using several combinations of self-talk statements to match different situations. It can include statements to use at different distances of a training or competitive performance, and in specific situations. For example, a person taking part non-competitively in a half-marathon may use something like the following:

When	Self-Talk Statements
First mile	"Enjoy the experience"
Miles 2-3	"Watch your pace"
Middle miles	"How's your running form?"
Towards the end	"Did deep – You can do it!"
Final mile	"Come on, just one last push!"
Sections with no crowd	"You're doing great. Keep it up!"
If I fall behind my pacer team	"I'm running a good time and may catch them in the last mile"
If the weather is awful	"It's one of those days – Time to adjust my goal"

__T__rain Self-Talk Plans to Perfection

You are encouraged to practice your self-talk plan in training and then in endurance events, so that strategic use of appropriate self-talk statements becomes more automatic, and so that strategies are tested and familiar before an important event. For example, a person training for a half-marathon could practise the self-talk that they have prepared for the first mile, miles 2-3, the middle miles, towards the end, and the final mile (as above) during equivalent distances of a preparatory 10km run. Similarly, a 1,500-metre runner who has planned to use motivational self-talk during the final 200 metres (e.g., "Keep pushing! Keep pushing!") could practice these statements in repeated, high-intensity intervals during training. Imagery (Chapter 10) could be a valuable psychological skill for practising using self-talk statements to cope with problems that you may encounter during an endurance event (e.g., falling behind a target pace).

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