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Self-talk in Sport

Athletes are naturally exposed to significant psychological challenges in sports, but do not wait helplessly for the assistance of sports psychologists or trainers. Instead, they practise one form or another of self-regulation. *Self-talk in Sport* explores one such self-regulatory strategy: self-talk, the inner voice that accompanies every human being throughout their lives. Over time, research has revealed many secrets of self-talk in sport, though many others remain unveiled. This book offers you the opportunity to discover the multiple identities of our self-talk, how the “inner coach” serves as a rational counterpart to the irrational self, and what we need to do to develop our inner voice to reach its maximum self-regulatory potential.

There is a general need for concrete interventions in sport, exercise, and performance psychology. In addition, the autonomous functioning of people is a central aim of psychological interventions that align with positive psychology and focus on people’s strengths rather than weaknesses. In this volume, researchers and applied practitioners are shown how they can use self-talk interventions to strengthen people’s rational self-regulation in order to deal with a variety of situations that apply to both sport and other exercise and performance contexts.

Since self-talk is a tangible result of cognitive processes and inner experiences that researchers and applied practitioners can barely access, *Self-talk in Sport* is a tool for sports psychologists to understand and interact with hidden parts within athletes that have a major impact on sport and exercise experiences and performance. A book demonstrating the diverse – both rational and irrational identities – of self-talk, as well as specific interventions to change the inner dialogue of athletes, is a fundamental piece in the education of sport scientists.

Alexander T. Latinjak is a senior lecturer and the course leader of the BSc (Hons) Sport and Performance Psychology at the University of Suffolk, and visiting researcher at the EUSES Schools of Health and Sports Sciences in Catalonia. Although Alexander wrote his dissertation on strategic self-talk interventions for tennis players, he has recently been more intensively involved in the study of spontaneous and goal-directed self-talk. His research

led to the design of a reflexive self-talk intervention and the development of a conceptualisation of self-talk based on the distinction between organic and strategic self-talk.

Antonis Hatzigeorgiadis is a professor at the Department of Physical Education and Sport Science at the University of Thessaly, and director of the postgraduate programme Psychology of Physical Education and Sport. His main research interest has been self-talk, on which he has authored more than 35 articles and six book chapters. He is Associate Editor at *Sport, Exercise and Sport Psychology*, and has served as member of the managing council of the European Federation of Sport and Exercise Psychology for 12 years.

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In memory of Dr Bernat Llobet,
a dear friend and inspiring colleague.

Alexander

To Nadia.

Antonis



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1 Locating Self-talk in the Knowledge Map of Sport and Exercise Psychology

Alexander T. Latinjak

Introduction

This book is about self-talk in sports and is therefore part of the literature in sport psychology. Sport psychology is, content wise, one of the broadest subdisciplines in psychology and therefore one of the most complex fields to master. This is a judgement based on my personal experience gained in developing an undergraduate educational programme in sport psychology. A degree in sport psychology is implicitly linked to the educational offer in psychology, and one of the main questions I had to answer was which core psychology modules should be taken by sport psychology students. To the frustration of some of my less diligent students the answer was: basically all.

The magnitude of the diversity of topics in sport psychology is easy to imagine, if one looks at the content lists of the comprehensive handbooks in this area. For instance, in 62 chapters, the *Routledge Companion to Sport and Exercise Psychology* (Papaioannou & Hackfort, 2014) represents the essence of our field. This comprehensive handbook includes such diverse chapters as “Attention and Neurocognition,” “Gender and Sexual Orientation,” “Organizational and Community Physical Activity Programs,” and “Self-talk.” One consequence of this breadth of topics in our discipline is the challenge of being at the cutting edge of scientific developments. Sadly, it is much more likely that sport psychologists specialise in certain areas within the field and neglect others. In order to avoid overspecialisation, one should keep an eye on the big sport-psychology picture when studying self-talk, which represents in our massive area a niche topic. This may be all the truer for self-talk as a concept with multiple meanings compared to other concepts with a single unambiguous meaning. To open this book, it seems therefore essential to locate the concept of self-talk in the universe of sport psychology before dealing with the definitions and research lines of self-talk (in Chapter 2).

In terms of psychology subdisciplines, self-talk as a topic fits into cognitive psychology. Self-talk is closely and inextricably linked with spontaneous and rational thought processes (Latinjak, Zourbanos, López-Ros, & Hatzigeorgiadis, 2014), in line with cognitive self-regulation (Van Raalte, Vincent, & Brewer, 2016). Self-talk also presents similarities with

mind wandering (Chapter 15), when the content of self-verbalisations is unrelated to the task at hand (Latinjak, 2018a, 2018b). Self-talk, however, is also a relevant topic in developmental psychology. Vygotsky (2012), for example, has paid close attention to the role of self-talk, often referred to as private or inner speech, in the internalisation process of language for the formation of verbal thoughts in children. Furthermore, clinical psychologists have recurrently focused on their clients' self-talk. For example, self-defeating self-talk often manifests itself in mood, anxiety, and eating disorders (Wright, Basco, & Thase, 2006). Finally, self-talk is also crucial for various psychotherapeutic approaches, such as Cognitive-Behaviour Therapy (CBT) and Rational Emotive Behaviour Therapy (REBT, Chapter 8), as it has been identified as an important mechanism for behaviour change (Michie et al., 2016).

Self-talk: A Psychological Concept

My goal in this opening chapter is to locate self-talk within the wide range of sport psychology topics. However, this undertaking is a challenge because of a particular feature of the term “self-talk” in sport psychology. “Self-talk” is a generic term, a psychological concept that is used to describe distinct psychological experiences that are scattered all over the knowledge map of sport psychology (Latinjak, Hatzigeorgiadis, Comoutos, & Hardy, 2019).

Psychological concepts, including self-talk, are essential to understanding the world around us and sharing our psychological experiences with others through a socially constructed network of meaning units. And the variety of qualitatively different psychological experiences we try to share is enormous. Countless interconnected events in our nervous system lead to an entangled network of various psychological phenomena: both of intrapersonal nature, such as thoughts or beliefs, as well as of interpersonal nature, such as cohesion or communication; some happen unintentionally, such as selective attention or emotions, others happen intentionally, such as planned behaviour or rational decision-making.

In our quest to fathom our own being, we are constantly constrained by a massive restriction. Our ability to understand is overwhelmed by the immense complexity of human individual and collective construction. It is virtually impossible to comprehensively understand even a single incident that is as common as a child playing in the school yard. The vast number of interconnected variables that precede, explain, and follow the incident outstrips the ability for integration of the human brain. As humans, our strategy of countering the immense complexity of reality is to break it down into smaller, digestible units. In a few words: we simplify. We divide reality into concepts. Popular concepts in sport psychology include motivation, identity, visualisation, cohesion, emotion, or, as shown in this book, self-talk. Concepts represent comprehensible domains in this complex reality. Keep in mind, however: as important as the concepts we use may be, they are a by-product of simplification. At a tangible level, most psychological concepts

cease to exist. As important as our thoughts, emotions, goals, and identity are to us, when we look into the human brain, they dissolve into countless interactions within our nervous system (Marupaka, Iyer, & Minai, 2012) that give rise to the intricate and incomprehensibly complex network of psychological experiences. Concepts such as self-talk are useful and necessary subdivisions in our knowledge, but often do not correspond with subdivisions in nature. As important as concepts for human thinking and communication are, when these artificial subdivisions are misunderstood for natural entities, we let them tyrannise over our future understanding of the world.

Self-talk and the Knowledge Map of Sport and Exercise Psychology

Given the transversality of sport psychology, it is obvious that the area is dealing with innumerable psychological concepts. In attempting to locate self-talk in the sea of concepts, it became clear that a schema was needed to orient and generally guide us in our quest for expertise in the field. The scheme we use is called the Knowledge Map of Sport and Exercise Psychology (Latinjak, unpublished manuscript). I have dedicated considerable efforts to create such a map for both myself and my students. A systematic review of reviews in sport psychology published in sport psychology journals over the past decade has revealed what is still my greatest achievement on the road to simplification. A map that at its heart has the form of a triangle. In the three vertices of that triangle, psychological concepts are divided into three broad groups: psychological processes, psychological skills, and psychological interventions (Figure 1.1). Connected to the triangle, there is a fourth set of concepts that are central to sport psychology: environmental factors that contribute to the sport experience.

Environmental Factors

Environmental factors, which may be transient situational or relatively stable contextual factors (Figure 1.1), play an important role in sport performance and well-being. These environmental factors are diverse, ranging from cultural variables, such as the media, religion, or sport policies, to task characteristics regarding training (e.g., the difficulty of an exercise) and competition (e.g., the score during a game). They include physical conditions such as heat or sports material as well as behaviour by others such as coaches, peers, and parents.

Self-talk is usually not considered an environmental factor in sport psychology. However, some authors have recognised that self-talk audible to others may have self-representative effects and influence others (Van Raalte, 2010). For example, an evolving line of research deals with self-talk as an expression of emotions and the effects of such self-talk on opposing athletes (Fritsch & Latinjak, 2019). If an individual's self-talk affects another athlete, the self-talk can be viewed as an environmental factor that influences the psychological processes of others.

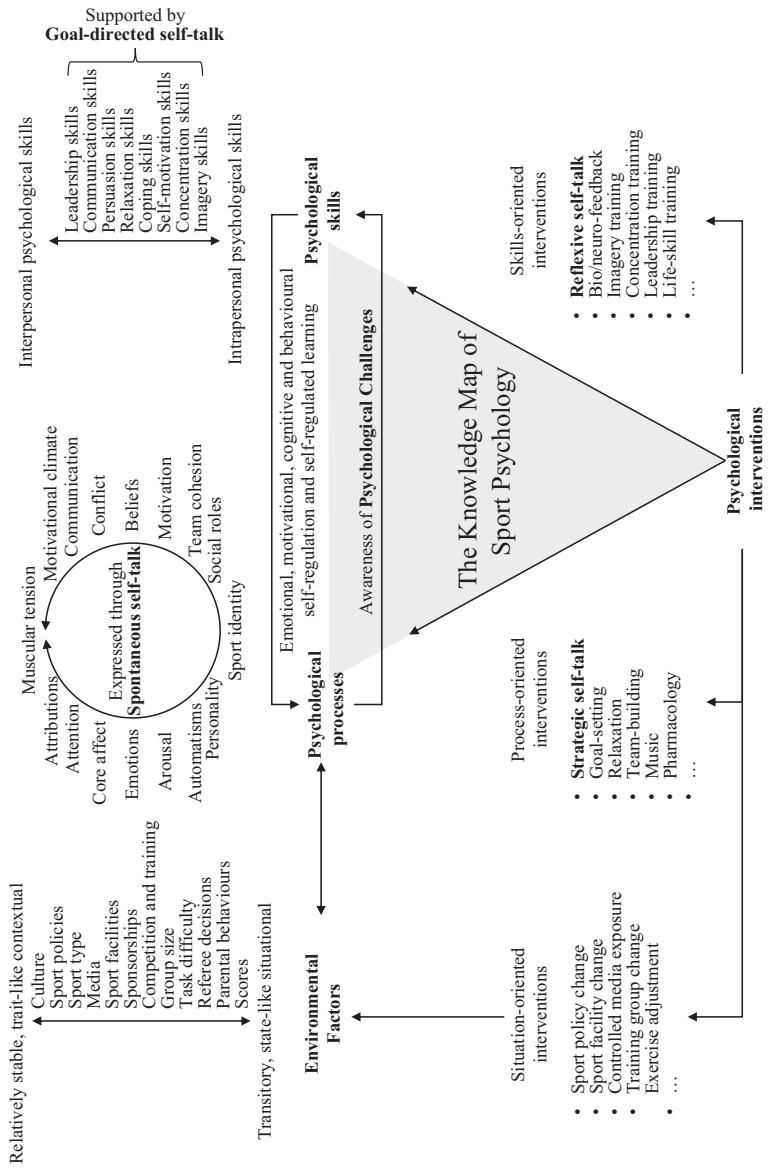


Figure 1.1 The Knowledge Map of Sport Psychology, with Examples of Psychological Concepts, Including Highlighted Self-talk Concepts.

Psychological Processes and Spontaneous Self-talk

Psychological processes can be conceived as intra- and interpersonal processes that are inescapable building blocks of the experience of life (Dohme, Backhouse, Piggott, & Morgan, 2017). Psychological processes describe the state of an individual or a group in a particular time frame that ranges from seconds (e.g., an emotional outburst) to decades (e.g., one's own identity). Events such as physical sensations, team cohesion, or personality are part of our existence. These events are part of everyday sports practice, regardless of our attitudes towards sport psychology or our intentions to prevent them from happening. Psychological processes change and can be shaped, but they never disappear until the end of our days. Athletes may try to avoid certain emotions such as anger, but it is a futile effort to prevent all emotions from occurring.

Self-talk can be a psychological process if it happens unintentionally and effortlessly and reflects other psychological processes such as emotions (I am the worst), beliefs (I can't make it), or attributions (I'm the unluckiest person ever). This self-talk, which is associated with psychological processes, is called *spontaneous self-talk* (Figure 1.1). After scoring, we can say *well done*, or after making a mistake, we can express our frustration by insulting ourselves. These statements are part of sports practice and it makes little sense to make efforts to avoid them.

Psychological processes interact with each other and are shaped by environmental factors (Dohme et al., 2017). A competition might elicit anxiety, whilst anxiety is associated with spontaneous self-talk (I can't make it) (Latinjak, Hatzigeorgiadis, & Zourbanos, 2017; see also, Chapter 6). In addition, a task-oriented motivational climate can turn anxiety into excitement and subsequently change the content of spontaneous self-talk (I really want to try; Zourbanos et al., 2016). Conversely, psychological processes also shape environmental variables. For example, frustration and negative spontaneous self-talk (I hate this sport) can lead to less support from the trainer and peers.

Regarding spontaneous self-talk, despite similarities with other psychological processes, it would be misleading to regard them as equal. To illustrate this, all other psychological processes can be experienced independently of spontaneous self-talk, whereas spontaneous self-talk never appears without other psychological processes. You can be angry without saying *I'm so angry*, but you would not say *I'm so angry* without feeling anything like anger. I would call spontaneous self-talk therefore rather an expression of psychological processes such as attitudes, emotions, or motivation, which break through into awareness. For example, a negative performance belief grows subconsciously until it is spontaneously verbalised (I'm playing too bad today) and becomes, thereby, accessible to consciousness. This self-consciousness is a key element in sports because athletes are not just passive observers of their own psychological processes. By putting into practice psychological skills, athletes actively attempt to alter the course of their psychological processes (e.g., by settling a dispute), or to modify how they are expressed (e.g., by acting as if nothing had happened).

Psychological Skills and Goal-Directed Self-talk

Psychological skills are used by athletes to regulate psychological processes (Vealey, 1988). In the Knowledge Map of Sport and Exercise Psychology, the concepts grouped into this cluster refer to the ability of individuals or groups to regulate themselves or other persons belonging to their own group. In contrast to psychological processes, psychological skills are used rather consciously and experienced as effortful and intentional. Psychological skills are in many ways similar to physical skills (Baumeister, Tice, & Vohs, 2018). They develop through maturation and can be trained for extraordinary challenges. If neglected, psychological skills may also subside, similar to physical resistance after a period of inactivity.

Examples of interpersonal psychological skills include leadership skills to guide others to pursue shared goals, communication skills to mediate in conflicts, and persuasion skills to enhance self-efficacy of others. In terms of intrapersonal psychological skills, athletes may have imagery skills to visualise a chain of technical actions, concentration skills to remain focused despite distractions, and relaxation skills to stay calm in critical moments of the game. There is also some kind of self-talk that goes well with the cluster of psychological skills in the Knowledge Map of Sport and Exercise Psychology. The self-talk used for self-regulatory purposes is called *goal-directed self-talk* (Figure 1.1). Goal-directed self-talk is described as verbalisations that are used intentionally to solve a problem or make progress on a task (Latinjak et al., 2014).

Interestingly, goal-directed self-talk often works differently from other psychological skills. Most psychological skills are attempts to exercise self-control over related psychological processes. For example, concentration skills aim to control attention. Goal-directed self-talk is not used to change spontaneous self-talk. Instead, goal-directed self-talk is used to control all psychological processes that may or may not be expressed through spontaneous self-talk. Goal-directed self-talk can be used, among other things, to regulate appraisals, control technical execution, take strategical decisions, regulate psychophysiological arousal, elicit functional emotions, increase effort, resist temptations of disengagement, strengthen confidence, and re-establishing goals (Latinjak, Masó, Calmeiro, & Hatzigeorgiadis, 2019). Therefore, goal-directed self-talk should be understood more as a support mechanism for all types of psychological skills, as diverse as leadership skills, relaxation skills, or concentration skills.

In applied practice, sports psychologists are dedicated to exploring the use of psychological skills, including the goal-directed self-talk, as psychological skills are the key to successful athletic performance (Birrer & Morgan, 2010). As a rule, at least two complementary questions are needed to adequately test the quality of the use of psychological skills. First, were the psychological skills strong enough to handle relevant psychological challenges? Second, what psychological skills have been used to deal with these psychological challenges? While the justification for the first question seems intuitive, the justification for the second question requires some elaboration. The way in

which some psychological skills, including goal-directed self-talk, are used can be detrimental in the long run, even though they are momentarily effective. For example, self-statements such as “Don’t worry; he has no idea what he’s talking about” can help lessen the perceived meaning of criticism from the coach, effectively dealing with frustration. Ignoring the coach’s comments, however, may be detrimental to learning in the long term and can severely affect the relationship between trainer and athlete. If it turns out that the athlete’s psychological skills are not strong enough to cope with psychological challenges, or if the psychological skills selected have potentially negative long-term effects, the athlete can benefit from external help in the form of a psychological intervention. Of course, psychological interventions can also enhance strong skills that are used appropriately, to prepare the athlete for new, greater psychological challenges that are to be expected in the future.

Psychological Interventions

Psychological interventions, in the Knowledge Map of Sport and Exercise Psychology, include groups of actions of third parties, who are not intricately involved in a psychological challenge, with the aim of preventing or regulating unpleasant and/or detrimental psychological processes. In addition, these actions can also promote pleasant and/or functional psychological processes and help individuals or groups achieve psychological growth and autonomy. Psychological interventions are of course performed by sport psychologists, but also by coaches and staff members, parents, or other athletes.

Psychological interventions are described in this synthesis either as targeted interventions (see, Harackiewicz & Priniski, 2018) or as therapeutic frameworks (e.g., REBT) that encompass a wide range of strategic measures used to improve athletic experience and well-being. The most recurrently used targeted interventions include self-talk, goal-setting, relaxation, mindfulness, imagery, and bio-feedback training (Birrer & Morgan, 2010). Therapeutic frameworks usually include a wide range of actions, so that their final effect can only be explained by the conjunction of changes in environmental factors, psychological processes, and psychological skills. Along these lines, self-talk is considered within several of these major therapeutic frameworks. For example, changes in organic self-talk have been identified as a mechanism of change in CBT (Michie et al., 2016).

Compared to therapeutic frameworks, targeted interventions consist of fewer actions and their effect can usually be explained by changes in mainly one of the three other clusters in the Knowledge Map of Sport and Exercise Psychology (Figure 1.1). The first strand of targeted interventions aims to change environmental factors that precipitate a psychological challenge. Although no self-talk intervention is included in this group, some interventions, like autonomy support training for coaches, can affect spontaneous self-talk as an outcome variable (Marjanović, Comoutos, & Papaioannou, 2019; Oliver, Markland, Hardy, & Petherick, 2008; see also, Chapter 6).

The second group of targeted interventions aims to change psychological processes. For instance, a goal-setting intervention aims to set specific, measurable, accepted, realistic, and time-based goals for sport practice and competition (Locke & Latham, 2002). Along these lines, the possibly most popular self-talk intervention where athletes strategically repeat cue words is mainly focused on changing psychological processes, such as attention and spontaneous thoughts, emotional processes, such as anxiety and confidence, and motivational processes, such as effort and persistence (Galanis, Hatzigeorgiadis, Zourbanos, & Theodorakis, 2016; see also, Chapter 9). These strategic self-talk interventions have also been used to facilitate learning of new sport skills (Ziegler, 1987). Although strategic self-talk interventions are often (to some extent erroneously) considered to be part of psychological skills training, they are not tested in applied research for their impact on psychological skills. To the best of the author's knowledge, no study has yet addressed the long-term effects of strategic self-talk interventions, including changes in metacognition, self-control, or mental toughness. All studies instead focused on immediate cognitive, affective, motivational, and behavioural outcomes. However, strategic self-talk interventions could theoretically have long-term implications for self-regulation if athletes autonomously reflect on the self-talk cues and integrate them in their repertoire of goal-directed self-talk (Latinjak, Hatzigeorgiadis, et al., 2019).

It is the third group of targeted interventions that primarily aim to aid individuals or groups to prevent or master psychological challenges by strengthening their psychological skills. Stronger psychological skills, and better use of these skills, will, in turn, lead to a more effective self-regulation and, thus, more pleasant and/or constructive psychological processes (MacIntyre, Igou, Campbell, Moran, & Matthews, 2014). In terms of self-talk, reflexive self-talk interventions involve a process of reflection about goal-directed self-talk to enhance the athlete's metacognitive knowledge and psychological skills. So far, research has shown that reflexive self-talk interventions help self-regulation by facilitating awareness of psychological challenges and by improving sensibility for more problem-relevant psychological skills (Latinjak, Font-Lladó, Zourbanos, & Hatzigeorgiadis, 2016).

Final Remarks

Adopting a pure self-talk perspective, we can summarise the previous sections as follows: most psychological processes can be expressed through spontaneous self-talk and thus become more accessible to awareness. When individuals become aware of psychological challenges, including unwanted unpleasant and/or detrimental states and longed-for pleasant and/or functional states, they can use goal-directed self-talk to support a variety of psychological skills and self-regulatory strategies. If the goal-directed self-talk supports the wrong strategies, or if the supported skills are too weak, or simply to prepare the individual for future major challenges, self-talk interventions can be used. Strategic self-talk interventions aim to change psychological processes directly

through the repetition of cue words, while reflexive self-talk interventions indirectly influence psychological processes by enhancing goal-directed self-talk through a process that creates metacognitive knowledge.

Creating a Knowledge Map of Sport and Exercise Psychology has helped me and my students to steer strategically through the numerous concepts in our field; concepts that were created for the purpose of simplification, to make sense of the vast complexity of human experiences, which clearly subjugates our, comparatively, restricted intellectual capacity. However, when attempting to place self-talk on the map, I have also discerned that, in our attempt to simplify, we have blended different psychological experiences into the same concept. Although all facets of self-talk share a communality, that is, the act of talking to the self, they are rooted in fundamentally distinct psychological experiences. The steady growth of self-talk research has produced findings that rendered our simplification as growth-inhibiting – a conceptual deficiency we intend to resolve in this book by demonstrating all that the term self-talk encompasses.

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Notes

Chapter 15

- 1 Although generally accepted as the conceptualisation of flow across many domains, some issues have been raised with this conceptualisation of flow in sport (e.g., Jackman, Fitzpatrick, Lane, & Swann, 2019; Swann et al., 2018).
- 2 Athletes have reported using self-talk to sustain “clutch” states (Jackman, Crust, & Swann, in press; Swann et al., 2017a). Clutch states are considered to underlie clutch performance, which is defined as enhanced performance in pressure situations (Otten, 2009), and includes several characteristics that are distinct from flow, including: effortful, complete, and deliberate focus; intense effort; and conscious awareness of the situation (Swann et al., 2017b, 2019).

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