


# Measurement and Training of Self Talk in Sport

**Nikos Comoutos (former Zourbanos)**

**Associate Professor  
in Psychology of Physical Education and Sport  
University of Thessaly  
Department of Physical Education and Sport Sciences  
GREECE**

A silhouette of a sprinter in a starting crouch on a track, positioned to the left of the text.

# Structure

- Introduction - What is self-talk (ST) – Terms
- Generation of self-talk – Difference between automatic and strategic ST
- Methodology of research of inner speech/ST
- Measures of ST in sport settings
- Strategic ST
- Training of ST
- Conclusion



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

# Introduction

Plato in his dialogue called “Theaetetus, What is knowledge (*episteme*)?” ” defined thoughts as “the conversation, which the soul holds with herself” (Theaetetus, 190a, 369 – 367 BCE)

Although the notion of self-talk exists from the ancient times, in the existing literature, the terminology of thoughts is often conveyed by different terms, which differ from theorist to theorist (Guerrero, 2005)



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

# Introduction

Glass and Arnkoff (1997) described thoughts as “cognitive products that... are an individual's thoughts, often referred to as self-statements, **self-talk**, **automatic thoughts**, or internal dialogue (p.911).

In the sport psychology context, Hardy (2006) operationally defined self-talk as “verbalizations or statements addressed to the self, multidimensional in nature, having interpretive elements association with the content of statements employed, is somewhat dynamic and serving at least two functions; instructional and motivational for the athlete” (p. 84).



ASPASP 2018

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

With regard to its generation, self-talk can be described as **inherent** or **strategic**.

- Inherent self-talk refers to thoughts individual experience intrinsically, also referred to as automatic self-talk, because these are the things we say to ourselves which are not planned or prepared.
- In contrast, strategic self-talk refers to the instrumental use of cues or phrases that are planned or used in a systematic way as a mental self-regulatory strategy.



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

# Methodology of research on inner speech/ inherent self-talk

In cognitive assessment literature have been presented various methodological approaches in order to identify individuals' cognitive processes or structures:

- think-aloud
- recording of private speech
- self-statement inventories**
- clinical interview
- thought listing



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology



# Measures of self-talk in sport settings

## Measures of self-talk in sport psychology

Van Raalte et al. (1994) were the first to assess observable self-talk using the Self-Talk and Gestures Rating Scale (STAGRS). This observational tool was developed to record external self-talk and gestures during tennis matches

### 1) Self-talk examination as a cognitive strategy

#### Test of Performance Strategies-2 (TOPS-2)

(Thomas, Murphy, & Hardy, 1999).

2) Self-Talk Use Questionnaire (STUQ), (Hardy et al., 2005), an instrument to assess where, when, what, and why ST is used.

3) Thought Occurrence Questionnaire for Sport- TOQS, examines the underlying structure of athlete's negative thoughts (Hatzigeorgiadis & Biddle, 2000)



ASPASP 2018

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

4) Zervas et al. (2007) developed the Self-Talk Questionnaire (S-TQ), an instrument comprised of two subscales with a specific emphasis on the instructional and motivational functions of self-talk.

5) Theodorakis et al. (2008) developed the Functions of Self-Talk Questionnaire (FSTQ), a psychometrically robust instrument that better captures the breadth of the functions of self-talk via its attentional focus, increase confidence, regulate effort, control cognitive and emotional reactions, and trigger automatic execution subscales



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology



6) Zourbanos, Hatzigeorgiadis, Chroni, Theodorakis, and Papaioannou (2009) developed the Automatic Self-Talk Questionnaire for Sport (ASTQS), a comprehensive (and hierarchically structured) instrument that identifies 8 distinct dimensions of self-talk (positive: psych up, confidence, anxiety control and instruction, and negative: worry, disengagement, somatic fatigue, and irrelevant thoughts). As a result of measurement development work carried out during this timeframe, researchers now have a number of options available to them should they wish to measure athletes' use of self-talk



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

## Scoring

Negative Self-talk	Worry	I am going to lose (1) I'm wrong again (5) I am not as good as the others (9) I am not going to reach my goal (13) I cannot concentrate (17) I am not going to make it (20) What will others think of my poor performance (21)
	Disengagement	I want to stop (2) I want to get out of here (6) I think I'll stop trying (18) I can't keep going (10) I am fed-up (14)
	Somatic fatigue	My body is not in a good condition (4) I am tired (8) Today I 'suck' (12) My legs/arms are shaking from tiredness (19) My body doesn't help me today (16)
	Irrelevant thoughts	I am thirsty (3) What will I do later tonight (7) I am hungry (11) I want to take a shower (15)
Positive Self-talk	Psych-up	Let's go (1) Power (5) Give 100% (9) Do your best (13) Strong (17)
	Anxiety control	Relax (2) Don't get upset (6) Calm down (10) No stress (14)
	Confidence	I believe in me (3) I am very well prepared (7) I feel strong (11) I can make it (15) I believe in my abilities (18)
	Instruction	Concentrate on your goal (4) Focus on what you need to do now (8) Concentrate on your game (12) Focus on your technique (16) Concentrate (19)

## AUTOMATIC SELF-TALK QUESTIONNAIRE FOR SPORTS (ASTQS)

### INSTRUCTIONS

On the following questionnaire, there are phrases describing athletes' thoughts. Please use the rating scale below to indicate, based on your latest competitions, thoughts you usually experience or intentionally use while performing. Your responses will be kept in **absolute confidence**. In other words, your individual answers will not be shown to anyone. Please read each statement carefully, and then choose the correct response for you by circling the appropriate number.

**0 = never, 1 = rarely, 2 = sometimes, 3 = often, 4 = very often**

The Sport Psychologist, 2009, 23, 233-251  
© 2009 Human Kinetics, Inc.

### Automatic Self-Talk Questionnaire for Sports (ASTQS): Development and Preliminary Validation of a Measure Identifying the Structure of Athletes' Self-Talk

Nikos Zourbanos, Antonis Hatzigeorgiadis, Stilianos Chroni, Yannis Theodorakis, and Athanasios Papaioannou  
University of Thessaly

ASTQS has been translated in various languages: Dutch, German, Persian, Spanish, Turkish, Indonesian, Serbian, Romanian, & Finish.



# ASPASP 2018

The 8th Asian South Pacific Association of Sport Psychology International Congress of Sport Psychology

# Strategic self-talk

The most interesting in terms of competitive sport question is the relationship between self-talk and performance; it's a reciprocal relationship. On one hand, how athletes perform influence what they say to themselves, and in turn what athletes say to themselves may influence their performance (Hatzigeorgiadis et al., 2004)

When performing well, athletes are more likely to have more positive (e.g., self-affirmative; “nice”, “let’s go”) and less negative (e.g., self-deprecatory; “you stupid”, “not good enough”) self-talk; and in contrast, when performing poorly athletes are more likely to have more negative (e.g., self-blame; “another mistake”, “can’t take it anymore”) and less positive (e.g., self-praising; “doing well”, “keep going”) self-talk



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

# Strategic self-talk

Self-talk strategies involve the use of cue words or small phrases aiming at enhancing performance through the activation of appropriate responses. The rationale behind the use of self-talk strategies is that athletes provide appropriate instructions or directions for action to themselves and subsequently execute the correct or appropriate action by simply following the self-instruction they have used.



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

# Strategic self-talk

A meta-analysis of studies on the effectiveness of self-talk interventions in enhancing performance (Hatzigeorgiadis, Zourbanos, Galanis, & Theodorakis, 2011) has provided more robust evidence for the value of self-talk strategies. Overall, it was found that self-talk interventions have a moderate effect on sport task performance (effect size = .48).



## Self-Talk and Sports Performance: A Meta-Analysis

**Antonis Hatzigeorgiadis, Nikos Zourbanos, Evangelos Galanis, and  
Yiannis Theodorakis**

Department of Physical Education and Sport Sciences, University of Thessaly, Trikala, Greece

Perspectives on Psychological Science  
6(4) 348–356  
© The Author(s) 2011  
Reprints and permission:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1745691611413136  
<http://pps.sagepub.com>



## ASPASP 2018

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

# Strategic self-talk

...It was revealed that self-talk was more effective (a) when participants practiced self-talk over some sessions, rather than just using it without practicing it

(b) for relatively fine tasks, such as precision and accuracy tasks (e.g., passing and shooting accuracy or tennis forehand), compared to relatively gross tasks such as power and endurance tasks (e.g., cycling or jumping performance)

(c) for novel tasks and tasks in the learning stage compared to well learned tasks.



## Self-talk strategies... WORK!



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

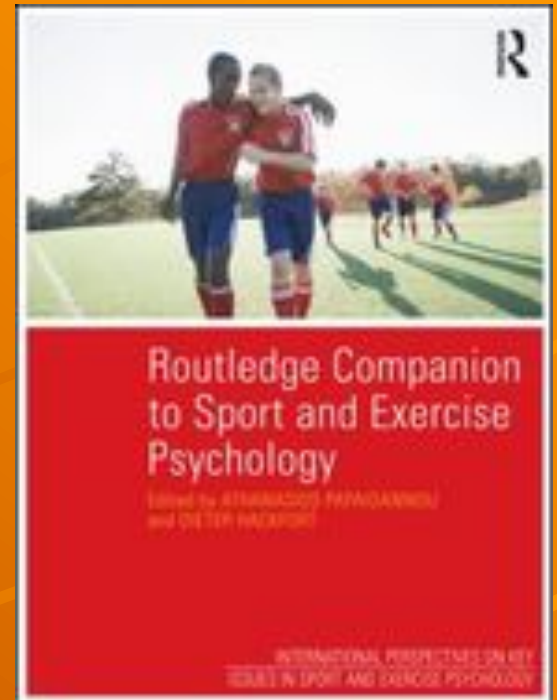


# Training of self-talk

How can we implement effective self-talk (ST) interventions?

## ST-IMPACT

- Identify what you want to achieve
- Match self-talk to needs
- Practice different cues with consistency
- Ascertain which cues work best for you
- Create specific self-talk plans
- Train self-talk plans to perfection



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

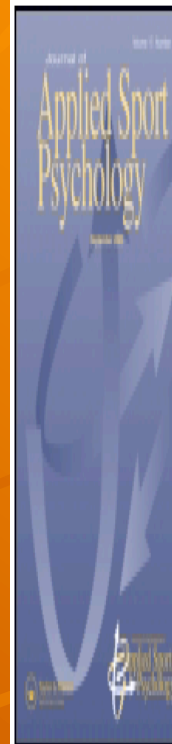
# Personal Daily Training Self-talk Card

## APPENDIX

### Example of a Personal Daily Training Self-talk Card

#### WEEK 5 – MOTIVATIONAL AND INSTRUCTIONAL SELF-TALK

	What	When	Why
<i>Motivational self-talk</i>			
All styles	Let's go Strong Power legs Give it all	Just before the start of each repeat During the push after each turn	To boost effort
<i>Instructional self-talk</i>			
Freestyle	Elbow	On releasing the arm for recovery	To keep the elbow high
Backstroke	Deep	When entering the arm in the water	To take the arm deep enough for the catch
Breaststroke	Ankles	When completing the leg stroke	To continue the move until the ankles come together
Butterfly	Chin	Just before the exit of the head	To keep the chin close to the surface



## Journal of Applied Sport Psychology

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/uasp20>

## Self-talk and Competitive Sport Performance

Antonis Hatzigeorgiadis<sup>a</sup>, Evangelos Galanis<sup>a</sup>, Nikos Zourbanos<sup>a</sup> & Yannis Theodorakis<sup>a</sup>

<sup>a</sup> University of Thessaly

Accepted author version posted online: 03 Apr 2013. Published online: 18 Nov 2013.



ASPASP 2018

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

# Conclusion

The Sport Psychologist, 2018, 32, 1-8  
<https://doi.org/10.1123/tsp.2017-0141>  
© 2018 Human Kinetics, Inc.

Human Kinetics  
EDITORIAL

## Reflections on the Maturing Research Literature of Self-Talk in Sport: Contextualizing the Special Issue

James Hardy  
Bangor University

Nikos Comoutos and Antonis Hatzigeorgiadis  
University of Thessaly

The utilization of multidisciplinary approaches, including physiological, psychophysiological, and neuropsychological perspectives could further develop a more comprehensive understanding of the self-talk phenomenon. Cross-cultural research would also likely facilitate our understanding of the content of athletes' self-talk used in different sports and at various competitive levels and various cultures.



ASPASP 2018

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology

**THANK YOU VERY MUCH FOR YOUR  
ATTENTION**

*For more information please don't  
hesitate to send me an e-mail:*

*[nzourba@pe.uth.gr](mailto:nzourba@pe.uth.gr) or  
[nzourba@hotmail.com](mailto:nzourba@hotmail.com)*



**ASPASP 2018**

The 8th Asian South Pacific Association of Sport Psychology  
International Congress of Sport Psychology