### Table of contents

Acknowledgments................................................................................................................. 3
List of Manuscripts/Publications ......................................................................................... 4
List of tables .......................................................................................................................... 7
List of figures ......................................................................................................................... 8
Abstract .................................................................................................................................. 9
Resumé ..................................................................................................................................... 12

**General introduction** .................................................................................................... 15
  - Self-talk in sport ................................................................................................................ 16
  - Emotions in sport ............................................................................................................ 22
  - Purpose and summary .................................................................................................... 27
  - References ...................................................................................................................... 30

**Self-talk and emotion in sport** ....................................................................................... 37
  - Spontaneous self-talk and emotions ............................................................................ 40
  - Goal-directed self-talk and emotions ......................................................................... 41
  - Self-talk interventions and emotions ......................................................................... 43
  - Applied recommendations ............................................................................................ 45
  - Conclusions .................................................................................................................... 47
  - References ...................................................................................................................... 48

**Self-talk and emotion regulation** ................................................................................... 52
  - What is an emotion? ....................................................................................................... 52
  - Cycle of emotions ......................................................................................................... 53
  - Self-talk and emotion regulation .............................................................................. 56
  - Conclusions .................................................................................................................... 64
  - References ...................................................................................................................... 64

**The relationship between self-talk and affective processes in sports: a scoping review** .......................................................................................................................... 69
  - Methods .......................................................................................................................... 73
  - Results ............................................................................................................................. 77
  - Discussion ....................................................................................................................... 91
  - References ...................................................................................................................... 96

**Self-talk and emotions in tennis players during competitive matches** ......................... 104
  - Methods .......................................................................................................................... 107
  - Results ............................................................................................................................ 113
  - Discussion ....................................................................................................................... 123
Antecedents and consequences of outward emotional reactions in table tennis .......... 136
Materials and methods .......................................................................................... 142
Results .................................................................................................................. 150
Discussion ........................................................................................................... 157
References .......................................................................................................... 165

General discussion ............................................................................................... 169
Discussion of the findings ..................................................................................... 169
Applied implications ............................................................................................ 172
Strengths and limitations ..................................................................................... 174
Conclusions .......................................................................................................... 175
References .......................................................................................................... 175

Appendix .............................................................................................................. 181
Ein theoretischer Beitrag zu Self-talk in der Sportpsychologie [A theoretical contribution on self-talk in sports psychology] ..................................................... 181
Ein Plädoyer für eine verstärkte Berücksichtigung der Verhaltenskomponente in der sportpsychologischen Emotionsforschung [A call for an increased consideration of the behavioural component of emotion in sport psychology research] ..................... 206
List of Manuscripts/Publications

PhD Thesis Research

Book chapters


Articles in peer-reviewed journals


Appendix


Other Publications

Book chapter


Articles in peer-reviewed journals


Abstracts in congress/conference proceedings


Abstract

The interaction of cognitive and affective processes is at the heart of psychological research. A popular cognitive construct that has received growing attention is self-talk. A recent perspective in self-talk has distinguished between two different self-talk entities relevant within the context of the sport. While the first entity strategic self-talk involves the deliberate use of cue words determined before the sport involvement, the second entity organic self-talk refers to the innate self-talk athletes have during their sport involvement. Furthermore, organic self-talk is distinguished between spontaneous self-talk, a more uncontrolled type of self-talk, and goal-directed self-talk, a more controlled type of self-talk. Taking the more theory-based approach of this perspective into account, a main purpose of the present PhD was to investigate the relationship between self-talk and affective processes. With regards to affective processes, emotions are typically defined to involve a subjective experience, physiological processes, and a behavioral component. Although, compared to the subjective experience, the behavioral component of emotions has been relatively less researched in sport psychology, it may offer an investigation of emotions ‘online’ during sport competitions. For this reason, a second focus of this PhD was on outward emotional reactions. The PhD consists of five different articles. The first article includes a review outlining general ideas of how the self-talk perspective, distinguishing between strategic and organic self-talk, including the subcategories spontaneous and goal-directed self-talk, may allow a systematic investigation between self-talk and emotions. In particular, it describes how spontaneous self-talk can reflect emotional processes, while a main function of goal-directed and strategic self-talk is emotion regulation. The main focus of the second article is on how goal-directed self-talk can influence emotions at different stages in the emotion process according to the process model of emotion regulation. In particular, relevant studies in the self-talk literature were classified under the stages of attentional deployment, cognitive change, and response modulation. The scoping review in the third article took a more systematic approach on capturing the available evidence on the
relationship between self-talk and affective processes within the context of sport. Based on the databases PubMed, Scopus, Web of Science, PsycINFO, and Sportdiscuss, 44 articles including 46 studies were identified. The findings of the studies were classified into organic and strategic self-talk. For organic self-talk, the results indicate a relatively consistent relationship between the valence of self-talk and the valence of affective processes. In addition, various functions of self-talk were related to emotion regulation. With regards to strategic self-talk, the review revealed a low number of intervention studies that were limited to anxiety. The fourth article describes a study conducted in competitive tennis matches to assess the relationship between self-talk and emotions. By using a video-assisted methodology, the results show that the intensity of both emotions experienced and outward emotional reactions was lower in situations where players reported goal-directed self-talk, either alone or in conjunction with spontaneous self-talk, compared to situations where players reported spontaneous self-talk alone. These results support the relevance of dual-process self-talk approaches and indicate the potential of goal-directed self-talk to regulate emotions. Finally, the fifth article includes a study that assessed antecedents and consequences of outward emotional reactions in table tennis. Based on the footage of competitive matches, outward emotional reactions were classified as positive, negative, or neutral. Situational factors related to the importance and the controllability of the situations were formed to assess the antecedents of outward emotional reactions. The outcome of the next point was taken to assess the consequences of outward emotional reactions. Results showed that situational factors related to the importance of the situation (e.g., remaining points in the set) could predict positive and negative outward emotional reactions, while the effects of situational factors related to the controllability of the situation (e.g., leadings in points) were less conclusive. In addition, neither positive nor negative outward emotional reactions could predict the outcome of the next point. Overall, the present PhD introduces various new directions in research that may help increase our understanding of the relationship between self-talk and affective processes. These findings may further be interesting from an applied
perspective, highlighting the potential of self-talk for self-regulation. In terms of emotions, the PhD also highlights the importance of considering the different emotion components when examining their role within the context of sport.
**Resumé**
