The Influence of Self-talks / Suggestions on Collegiate Athletes during Games:  
Psycho-physiological Measurements in Experiments

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Abstract

This study examines the influence of positive and negative self-talks/suggestions in competitive games, using psycho-physiological measurements in experiments. The subjects were 21 undergraduates and graduates (11 males and 10 females; average age: 20.9 ± 2.23), who major in sport sciences in a university. The following psychological measurements were used: Profile of Mood States (POMS)-brief Japanese version, Competitive State Anxiety Inventory-2 (CSAI-2), and Sport Competitive Anxiety Test (SCAT); the physiological measurements were used heart rate (Lorentz plot) and blood pressure. The experiments were divided into two conditions: positive self-talks/suggestions and negative self-talks/suggestions. The former was found to enhance the subjects’ performance, and the latter led to poor performance during competitive games. The subjects used each self-talks/suggestions with psycho-physiological measurements in each experiment. The results indicated a negative score for total mood disturbance (TMD) in POMS-brief Japanese version. The CSAI-2 revealed a decrease in somatic and cognitive anxiety, and the confidence score in CSAI-2 showed an improvement between the pre and posttest scores for positive self-talks/suggestions. And the physiological results’ heart rate (Lorentz plot) and blood pressure was not changeable to compare positive and negative self-talks/suggestions. However, the subjects’ comments suggested that positive and negative self-talks/suggestions influenced their minds in a positive and negative way, respectively.

Key words: self-talks/suggestions, competitive games, psycho-physiological