

## **The Effect of Concurrent and Terminal Feedback on $VO_{2max}$**

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### ABSTRACT

Concurrent feedback is the continuous provision of information regarding task performance given during the performance, while terminal feedback is the provision of this information only at the conclusion of the task. The following study examined performance on  $VO_{2max}$  tests ( $VO_{2max}$ , time to exhaustion, HR and RER) using these two types of feedback. Participants consisted of 14 males and 10 females with a mean age of  $21.7 \pm 2$  years. Stratified random sampling was used to assign participants to either concurrent or terminal feedback. The two groups ( $n=12$ ) were treated to a split-halves-transfer design upon completion of the first test. There were four separate groups: concurrent to concurrent feedback (CC), concurrent to terminal feedback (CT), terminal to concurrent feedback (TC), and terminal to terminal feedback (TT). Seven days transpired between the two tests. From the original sample of 24 participants, 21 completed all testing and were included in the data analysis. The terminal to concurrent feedback group (TC) showed a significant increase in  $VO_{2max}$  evidenced by the significant test by group interaction ( $F_{3,17} = 3.28, p = 0.047$ ). This finding suggests that using concurrent feedback as a form of motivation can elicit a greater  $VO_{2max}$  compared with terminal feedback.

