The ambivalence of self-controlled (motor) learning: A model-guided psychological analysis

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Self-controlled learning (SCL) is a relative new topic in the field of motor learning and simply means that the learner has control over (at least) one aspect of the learning situation. Results of studies who typically compared a group of self-controlled learners to a yoked group of externally controlled learners show that self-control, in fact, enhances the effectiveness of motor learning. Thus, there is some ‘self-control effect’ (Bund & Wiemeyer, 2005). However, this effect consistently occurs delayed: While both groups show similar performance during acquisition, the self-control group outperforms the externally controlled group in the retention test. To explain this delay of the self-control effect, a model was developed which contrast the cognitive and motivational processes of self-controlled learning and externally controlled learning. The basic assumptions of this model are:

1. Self-control learners have to organize their learning process by themselves.

   Therefore, their cognitive load is higher than the cognitive load of the externally controlled (yoked) learners.

2. Self-controlled learners are more intrinsically motivated than externally controlled (yoked) learners. This compensates the cognitive disadvantage and leads to similar acquisition scores of both groups.

3. In the retention test, self-controlled learners benefit from their individual learning during the acquisition phase and outperform their externally controlled counterparts.

The present study was conducted to evaluate the model.

References