

Dear COE Research Committee,

I would like to thank the COE research committee for funding my project entitled “The Effects of Self-Controlled Amount of Practice and Pacing on the Learning of A Novel Motor Skill”. The awarded funds allowed me to purchase the necessary equipment to collect data for this project. Specifically, the funds were used to purchase an external hard drive (\$125), additional mini dv tapes for my camcorders (\$91), a multi-view adapter (\$64), , and QDA minor qualitative software (\$1,360) to evaluate participants self-reported perceptions of their practice experience, Additionally, I was able pay qualified coaches to evaluate participant form (\$360). Total expenditures equaled \$2000. Using this equipment and personnel, I was able to complete data collection last fall semester (Fall 2011).

The central aim of the study was to examine how self-regulation of amount of practice (e.g., deciding the number of acquisition trials to complete) and pacing (e.g., deciding how fast to practice) influences motor skill acquisition of a basketball set shot. Participants were randomly assigned into a self-controlled (SC) or yoked (YK) practice condition. Participants in the SC condition decided their pacing and the number of shots completed during two fifteen minute acquisition blocks, while participants in the YK condition were paced and complete an equal number of shots as their SC counterpart. Retention and transfer tests were given after 24 hours to examine participants’ accuracy and form.

I am currently in the process of analyzing the data for this project, but the preliminary analysis appears promising. Initial results revealed that both groups showed improved form and accuracy across acquisition blocks ($p < .001$). During retention the SC group had higher form and accuracy scores than the yoked group ($p < .05$). Additionally, the SC group was more accurate than the YK group in recalling the number of trials they had completed during acquisition ($p < .05$). These findings are consistent with earlier research suggesting that the benefits of self-control generalize to situations in which learners control their amount of practice. These findings were presented during the COE Spring colloquium and have been submitted for a poster presentation at the North American Society For the Psychology of Sport and Physical Activity (NASPSPA) annual conference this June. I am confident that the completion of this project will make me more competitive for national grants to examine the role of self-regulation in learning.