LEARNING MOVEMENT PHASES DURING EARLY STAGES OF MOTOR LEARNING

Ghorbani, S.1, Bund, A.2

1: AKIAU(Alabad Katoul Branch, Iran), 2: UL(Luxembourg)

Introduction

• Overall movement instead of movement phases

• Learning the movement phases by novices is not experimentally understood.

• Detailed analysis of movement phases

contact: saeed.ghorbani@aliabadiau.ac.ir
LEARNING MOVEMENT PHASES DURING EARLY STAGES OF MOTOR LEARNING

Methods
Participants: Eight male and female young adults.
Motor task: Due to its clear movement phase structure, the Baseball-pitch was chosen as motor task.

Variables: Intra- and inter-limb coordination of upper- and lower body segments were measured as dependent variables.
Results: Results showed that there was a significant difference between stride phase and other phases in pretest, acquisition phase and both retention tests in all measured variables.
Discussion

• Participants experienced more difficulty by coordinating the stride phase than the other pitch phases.

• Stride phase is the only segment in which the participants had to move upper and lower body parts (right arm and left leg) simultaneously.

• Due to this feature, they needed to unfreeze more degrees of freedom, which led to inferior coordination performance in this phase.