Skill Levels and Control Modalities in Varsity Race Walkers

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Abstract

The purpose of this study was to examine the control styles and senses of movements in varsity race walkers and to clarify the relationship between them and their skill levels. 29 male walkers rated 317 items in 4-point usability scale, which were selected in advance from free answers on the control style and sense in race walking. Spatial, temporal, and kinetic control modalities and the details of higher rated items were analyzed from the viewpoint of skill level. The results showed that beginners rigidly pay attention to their walking form, which causes unstable movements, and advanced walkers perform in relaxed way, which rather leads to stable ones. The body axis felt in race walking was discussed as a stable center axis of movements, in order to coordinate upper and lower limbs, to absorb shocks at knees, and to transform the absorbed force into a forward movement.

Key words: varsity race walkers, skill levels, control modalities, body axis