原著（Original）

アメリカンフットボール選手の習熟差と問題空間

筑波大学　木島　章文

筑波大学　吉田　　茂

Problem Spaces of American Football Players at Different Skill Levels

Akifumi Kijima　　University of Tsukuba

Shigeru Yoshida　　University of Tsukuba

Abstract

The purpose of this study was to examine the cognitive structures (i.e. problem spaces) of different skill level running backs of American football in the framework of problem solving. The problem space suitable to running backs can be produced by two processors; segmentation or extracting important players in the field, and structuralization or making their movements together as a single structure. Four players in each group (beginner, intermediate, and advanced) performed ball carrying trials in the basic power-off-tackle play and explained their performances with verbal reports and gestures. Whereas beginners only referred to their own movements, higher level players concisely explained the positions and movements of the others with gestures from their own viewpoints, with some advanced players drawing play-charts in the air. These results suggest that beginners should learn the segmentation in actual playing situation at first and then step into the structuralization with play-charts.

Key words : American football, ball carrying, skill levels, problem space, segmentation, structuralization