

Development and Application of Visual Discrimination System in Perceptual Skill for Taekwondo Referee's Executive Judgment

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Abstract

The validity of tae kwon do referees' executive judgment is crucial to the development of competitive sports. During the process of cultivating a taekwondo referee, in addition to providing assistance through the workshop and passing on precedent experience, along with the integration of computer science technology, the information of previous competition spectacles could be used to develop the referees' perceptual skill supporting system and provide more simulations of real competition spectacles, and it would be beneficial for referees who are more familiar with the actual competition situation to enforce the judgment. This visual discrimination system can be divided into two stages. The first stage is to collect and videotape various situations of official taekwondo competitions and their judgments, and edit video clips of different situations by programming to set up the computer-based visual discrimination and evaluation system for taekwondo referee's executive judgment. The second stage is to establish the computer supporting visual discrimination and evaluation system for taekwondo referee's executive judgment, and to enhance referees' experience of actual execution. With the assistance of this evaluation system, taekwondo referees' executive skills can be recognized as a reference of employment; as well as to improve the reliability and validity of executive judgment for the referees through operating the training system.

Keywords: evaluation, training, operating system, programming