

VIDEO SELF-MODELING AND NON-PREFERRED SIDE KICKING ACCURACY

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Introduction

Football players favour one leg when kicking for both distance and accuracy, even though having lower limb skill bilaterality enables a player to avoid re-orienting their body, be less predictable, and increases scoring affordances. However, coaches often defer non-preferred side training due to time constraints. In Video Self-Modelling (VSM) performers repeatedly watch an edited video sequence showing the 'best of their best', to improve their average level (Dowrick, 1999). VSM techniques may provide a time-efficient method to address the issue of insufficient training time for the less skilled side. This study was designed to investigate the effect of VSM training on non-preferred side kick accuracy of Australian Football League (AFL) players.

Methods

At pre-test, 8 AFL players were filmed performing 25 kicks (left/ right randomly) over 25 metres toward a target player who could move his arms to take the mark, but not his feet. Video-clip sequences were created of each player's best preferred side kicks but with the image reversed, thus showing apparent high quality non-preferred side kicks. These were burnt onto an individualized DVD lasting 1minute. The hypothesis was that simply watching the kicking action would prime the motor needed for production through the action of mirror neurons (Rizzolatti *et al.*, 2008). The DVD was watched 3 x day for 14 days, then a post-test was conducted, with a retention-test 3 weeks later. Participants were told to watch the DVD but not given any other instructions.

Results and Discussion

Accuracy, as distance from the target, was significantly greater for the preferred foot at pre-test ($p=0.034$) but not after DVD watching ($p=0.055$). However, at retention-test preferred foot kick accuracy superiority had returned strongly ($p<0.01$). Debriefing indicated that, during the retention phase, participants had become aware of the reversal of the footage. This awareness may have confirmed lack of trust in performance with the non-preferred side, thereby leading to conscious skill control during testing, and consequently worse non-preferred side performance (Gorman *et al.*, 2009). Further work is needed to identify the training experiences that lead to greater trust and perceived self-efficacy regarding kicking with the non-preferred foot.

Conclusion

VSM is a promising method for training of non-preferred short kick accuracy in AFL players. However this methodology may be vulnerable to interfering cognition and be more effective when operating implicitly rather than explicitly.

References

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