SCI 55  The effect of non-dominant lower limb training for bilateral lower limb motor performance

Daly M, Parker-McCabe C, Mahony N & Donne B

Human Performance Laboratory, Anatomy Dept., Watt’s Building, Trinity College Dublin, Ireland

Introduction: Non-dominant lower limb training has been shown to be of benefit for bilateral lower limb performance in soccer players. This study evaluated non-dominant lower limb training on lower limb motor performance in Gaelic football. Methods: 13 senior male club level footballers; age 18–35yr; (M±SD) height 183±4cm and body mass 78.4±7.0kg were randomly divided into intervention (n=7) and control (n=6) groups. Participants all performed a standardised set of Gaelic football drills during training session warm up for six-weeks; the intervention group used their non-dominant limb and control group the dominant limb only. Gaelic football-specific skills tests of; shooting accuracy, passing accuracy and timed soloing, were performed for both limbs pre and post intervention. Results: In intervention vs. control comparisons significant improvements were noted in all skills tests in the non-dominant limb (P<0.05); results expressed as percentage change from baseline were; +72% vs. -2%; +85% vs. +23%; and -20% vs. +14% for shooting score, passing score and soloing time respectively. In analysis of dominant limb results, although % change from baseline data suggested a positive influence of non-dominant limb training [+21% vs. +6%; +36% vs. +32%; and -1.81% vs. -0.26%]; changes did not reach statistical significance for any comparison (P>0.05). Conclusion: This study demonstrated beneficial effects of 6 weeks non-dominant lower limb skills training in non-dominant limb motor performance in senior male Gaelic footballers. A greater sample size and extended training period would be required, to confirm a suggested crossover benefit of non-dominant lower limb training to the dominant limb.