A credible study on this perennial issue:

Mazyn LI, Lenoir M, Montagne G, Delaey C, Savelsbergh GJ. Stereo vision enhances the learning of a catching skill. Exp Brain Res. 2007 Jun;179(4):723-6. Epub 2007 May 9

The aim of this study was to investigate the contribution of stereo vision to the acquisition of a natural interception task. Poor catchers with good (N = 8; Stereo+) and weak (N = 6; Stereo-) stereo vision participated in an intensive training program spread over 2 weeks, during which they caught over 1,400 tennis balls in a pre-post-retention design. While the Stereo+ group improved from a catching percentage of 18% to 59%, catchers in the Stereo- group did not significantly improve (from 10 to 31%), this progress being indifferent from a control group (N = 9) that did not practice at all. These results indicate that the development and use of of compensatory cues for depth perception in people with weak stereopsis is insufficient to successfully deal with interceptions under high temporal constraints, and that this disadvantage cannot be fully attenuated by specific and intensive training.