Characteristics of Expertise in Able and Disabled Elite Golfers: The role of vision and technique

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To date, there has been a dearth of research examining characteristics of expert performance in able and disabled golfers. With golf becoming an Olympic sport and probable future Paralympic sport there needs to be an exploration of the characteristics of expert performance and crucially, whether there are noticeable skill differences between able and disabled golfers. To study these characteristics and skills, the eye-movements and kinematic parameters of golfers were recorded as they executed a series of putts from 6 and 12 feet. Participants (N=43) included golfers of three levels of expertise - expert (n=16), skilled (n=18), and non-expert (n=9) of which thirty were able and thirteen disabled. Our results suggest that there were notable and distinctive perceptual-cognitive expertise differences and kinematic performance differences. Theoretical implications of these results are discussed particularly in relation to the application of visual attention theory to practice and suggestions provided for further research particularly relating to motor cognition and pre-performance routines.