



LETTER TO EDITOR

Need for an Intervention Module to Enhance the Visuomotor Coordination of Athletes with Intellectual Developmental Disabilities

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DEAR EDITOR

Performance in sports requires visuomotor coordination. Visual-motor coordination refers to the coordination of visual perceptions with gross and fine motor activities. The skill is required in throwing and kicking a ball, hitting a ball with a racket or bat, and so on. Research has shown that hand-eye coordination is a necessary skill in different athletic performances (1) as well as in different sports such as basketball, football, and so on (2). In sports such as football, basketball, baseball, and similar other sports the athletes need to perceive the target stimulus and coordinate their motor movement with their perception accurately. This visual and motor coordination is important for successful performance and any problem in coordination can lead to performance error. The same is true in the case of track and field as well as other athletics performances. Error in visual-motor coordination also increases the probability of injury.

According to the Diagnostic and Statistical Manual of Mental Disorders V TR (DSM V TR) Intellectual Developmental Disability is a type of neurodevelopmental disability in which individuals have different types of cognitive impairments (3). Many individuals with intellectual disabilities are part of different sporting activities (4). Cognitive deficiencies such as impairments in visuomotor coordination, executive functioning, and working memory may limit their performance by increasing

errors and can even make them susceptible to injury. Therefore, Cognitive interventions can be helpful for these individuals. Cognitive intervention involves the practice of one activity multiple times and this practice can change the neural structure of the brain, thus, helping to develop new skills.

Although many cognitive interventions were developed over the years, most of these interventions focused on working memory (5) and executive functioning (6). There is very little research that focuses on visual-motor coordination. Therefore, it is essential to develop a well-planned invention module that focuses on improving the visual-motor skills of athletes with intellectual disabilities and making it a part of the athlete's training program.

AUTHORS' CONTRIBUTIONS

Study concept and design: Both. Acquisition of data: NA. Analysis and interpretation of data: NA. Drafting the manuscript: Both. Critical revision of the manuscript for important intellectual content: Both. Statistical analysis: NA. Administrative, technical, and material support: Both. Study supervision: Both.

CONFLICT OF INTEREST

The authors declare that they have no conflicts of interest.

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