

## Examining the Impact of Intelligence Quotients on Balance and Coordination in Adolescents with Intellectual Disability

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**Abstract :** Objective: Intellectual disability (ID) is characterized by limitations in both intellectual functioning and adaptive behavior, which covers many everyday social and practical skills. The aim of this study was to evaluate the balance and coordination performance determined between mild and moderate ID adolescents who regularly play sport. Methods: The study comprised a total of 179 participants, of which 135 were male adolescents with mild and moderate-level ID who regularly play sports ( $16.52 \pm 2.17$  years) and 44 age-matched male adolescents with typical development without ID who do not do any sports ( $16.52 \pm 0.99$  years). The participants with ID were students of Special Education Schools for the mentally disabled and had been diagnosed with ID at a Ministry of Health Hospital. The adolescents with mild and moderate ID had been playing football in their school teams at least 2 days a week, for at least one year. Balance and coordination of adolescents were assessed by Bilateral coordination and balance subtests of Short Form Bruininks-Oseretsky Test of Motor Proficiency (BOT-2 SF). Results: As a result of the evaluations comparing coordination and balance scores significant differences were determined between all three groups in favor of the peers without ID ( $p < 0.05$ ). Conclusions: It was observed that balance and coordination levels of adolescents with mild ID were better than those of adolescents with moderate-level ID but lower than those of peers without ID. These results indicate a relationship between IQ level and motor performance. Further comparative studies are needed on individuals with ID who play and do not play sports in order to examine the impact of participation in sports on the motor skills of individuals with ID.

**Keywords :** balance, coordination, intellectual disability, motor skills, sport

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