

Children and Olympic Lifting

The term "children" refers to the age group from 1yrs old to around 11-13yrs old (prepuberty). Olympic-style lifting requires advanced neuromuscular coordination that early childhood to elementary school children do not necessarily possess in general (Chaouachi et al., 2014). Children are of an age where neural activation patterns are capable of making rapid gains, but their muscular system is still under development and clearly not comparable to that of youths or adolescents (Chaouachi et al., 2014). Chaouachi et al. (2014) noted that there have been cases of children as young as 8yrs old learning Olympic-style lifting. However, resistance is not added until the movement patterns and coordination have been mastered properly under strict supervision (Chaouachi et al., 2014). Because children are of an age to make rapid neural development, teaching Olympic-style lifting movement patterns and coordination with a wooden dowel or plastic pipe would be reasonable (Chaouachi et al., 2014).

Ebada (as cited in Chaouachi et al., 2014) studied a 3-month children (mean age 13.2yrs) Olympic-style weightlifting program which resulted in an average 4.9% strength increase in nine tests including the snatch, clean, and squats. Johnson et al. (as cited in Chaouachi et al., 2014) noted that incorporating plyometric training with children elicited positive results in jumping and running performance with evidence supporting improvements in kicking distance, balance, and agility. Although there have been some studies conducted with children, more research and knowledge exists on Olympic-style lifting, explosive and plyometric exercises in adolescents and adults (Chaouachi et al., 2014). Carpinelli (2012) criticized the National Strength and Conditioning Association and the American College of Sports Medicine pointing out that there is a difference in "children", "youth", "adolescent" and "adult" training. Research in "youth/adolescents" may not necessarily carry over into "children" resistance training or even plyometric studies (Carpinelli, 2012).

Johnson, Salzberg, and Stevenson (2011) noted that plyometric training on young children improved fundamental movement skills such as jumping and running, but only a small effect on strength gains. The meta-analysis by Johnson et al. (2011) reiterated that the particular age group "children" benefit more by developing and nurturing motor skills and movement proficiency--"structured" and spontaneous play. Hopping and jumping are explosive, plyometric skills, but they are also natural movement and play.

References

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