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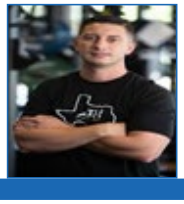

The Influence of Growth and Maturity on Long-term Athletic Development: Enhancing Performance and Injury Resilience Throughout Adolescence

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Abstract

Adolescence is a critical time in a young athlete's life with lasting effects on physical and psychosocial characteristics into adulthood. Bridging the gap between pre to post adolescence is particularly important for young athletes with aspirations to excel in sport, and therefore will need to specialize at some point. However, intensified sport-specific training around periods of accelerated growth and development further complicate and reinforce the need for a more qualitative approach to training. Periods of rapid growth increase the likelihood of injury in young athletes, while the underlying processes that contribute to growth, maturation and development may have implications for how young athletes adapt to training. The aim of the presentation is the to better equip practitioners to assess, interpret and prescribe training by better understanding the implications for exercise selection and rate of adaptation across young athletes of varying maturation. By investing time in building solid foundations a long-term athletic development program should be able to create robust athletes who are better able to avoid and recovery from injuries, and athletes who are able to train and perform at a higher level when they leave a youth program.

Biography

Micheál J Cahill serves as the Vice President of Performance and Sports Science at Athlete Training and Health (ATH), located in Texas, USA. He is responsible for the training philosophy within ATH, the development of all coaches and daily integration of services between hospital and academic partnerships as well as assisting in company growth and strategy. Micheál has previously worked with numerous individual athletes across a broad range of sports from amateur to professional level across the world as well as serving as the Director of Sports Science at Jesuit College in Dallas, catering for the needs of 750 athletes from 21 sports weekly from 2013 – 2018. Micheál completed his undergraduate and Master's degrees in Ireland before obtaining his PhD at Auckland University of Technology, New Zealand focusing on acceleration and resisted sprinting in young athletes, where he is currently a Research Associate supervising poatgraduate research across an array of area's in performance, fitness and health.

Publications

Micheál J. Cahill, Jon L.Oliver, John B.Cronin, Kenneth P.Clark, Matt R.Cross, Rhodri S.Lloyd, Sled-Push Load-Velocity Profiling and Implications for Sprint Training Prescription in Young Athletes(2020)

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Micheál J. Cahill, Jon L.Oliver, John B.Cronin, Kenneth P.Clark, Matt R.Cross,Rhodri S.Lloyd, Sled-Pull Load–Velocity Profiling and Implications for Sprint Training Prescription in Young Male Athletes(2019)

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