

Elite young soccer players are better than their sub-elite peers of comparable biological maturity in speed, strength and sport-specific skills: the Matthew effect or giftedness?

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Background

The widespread effect of relative age among young soccer players in highly competitive organisations is a significant issue. In this regard, it is of practical interest to study the speed and strength parameters and sport-specific skills of elite and sub-elite young soccer players of comparable chronological age and biological maturity.

Results

The study revealed significant differences between elite and sub-elite youth soccer players on all tests. Multivariate analyses demonstrated that elite players significantly outperformed their sub-elite peers in terms of speed, strength, change of direction and dribbling skills. Linear regression results showed that training experience explained only a small proportion of these differences ($R^2 < 0.04$), meaning that although it was significant, other factors probably had a greater influence on these differences.

Method

The study involved 95 players from a leading soccer academy and 93 players from sub elite level sports schools aged 11-12 years with comparable chronological and skeletal age and training experience. All participants completed the following tests: 30 metre sprint with splits of 5, 10 and 20 metres, horizontal jump, counter-movement jump, running with change of direction and speed dribbling test.

Conclusion

Young elite soccer players are significantly faster, stronger and skilful than their peers from sub-elite academies of comparable maturity. This may be due to both their inherently greater giftedness and the influence of a training environment that allows players from elite academies to develop their qualities faster and better. Investigating the role of each factor should be the subject of future research.