Holistic patterns as an instrument to predict performance of promising young football players

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Introduction

Multidimensional talent models represent the current state of the art. However, it remains unclear how these different dimensions interact. Based on current theories of human development, person-oriented approaches¹ seem to be particularly appropriate for talent research. The present study adopts this approach by looking at how a holistic system consisting of the different dimensions motivation, motor abilities and technical skills and the stage of development goes along with athletic performance.

Method

Using the LICUR method¹ it was examined which patterns were formed by the constructs net hope², motor abilities (score: counter movement jump³, 40m sprint, Yoyo intermittent endurance test⁴,), technical skills (score: dribbling, juggling, ball control⁵) and the so far achieved percentage of the predicted adult height⁶ and how these patterns are related to subsequent sporting success. 119 young elite football players were questioned and tested three times at intervals of one year, beginning at the age of 12. At the age of 15, the performance level the players had reached was examined (national, regional or no talent card).





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Results

At all three measuring points, four patterns were identified which displayed some degree of structural (SS) and high individual stability (developmental) types) (Fig. 1).



Figure 1. z-score profiles of the clusters (cluster centroids) and developmental (anti-)types for t_1 , t_2 , t_3 and the performance level at t_4

Discussion & Conclusion

As expected, the players with values above-average in all factors were significantly more likely to move up into the highest performance level. Physically strong, early developed players but with some technical weaknesses, have good chances to reach the middle performance level. The results point to the importance of holistic approaches for the prediction of performance in the medium-term among promising football talents, and thus provide valuable clues for the selection and promotion of those.

Literature

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