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3 • SPORT TRAINING

WHAT DISCRIMINATES ELITE
AND SUB-ELITE YOUTH
FIELD HOCKEY PLAYERS?

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ABSTRACT

To investigate in young (mean age 13.4, $s=0.35$) and older players (mean age 17.1, $s=0.70$) which combination of measures best predicts if a talented field hockey player is considered youth elite or youth sub-elite, 224 talented field hockey players ($n=63$ youth elite; $n=161$ youth sub-elite) completed a multidimensional test battery with measures for training, anthropometric and physiological characteristics, technical skill, self-reported cognitive skills in tactical decisions, and psychological characteristics. Discriminant analyses with Z-scores explained 40% of variance in young and 51% in older players, with correct prediction of group membership of 70.1% and 78.7%, respectively. Specific training and field hockey skill best discriminated between elite and sub-elite players. It is recommended that in talent identification, attention is paid to the combination of several multidimensional performance characteristics, whereas in talent development accumulated sport-specific training in particular seems to increase levels of performance.

KEYWORDS: talent identification, talent development, multidimensional performance characteristics, specificity of training.

• 51

INTRODUCTION

There is a long history in psychology of using multidimensional test batteries to predict either expert performance or the probability of attaining expert levels of performance in tasks that involve a combination of perceptual and motor skills (e.g., Damos, 1996; Fleishman,

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