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ECONOMICS

A Star Is Made

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The Birth-Month Soccer Anomaly

If you were to examine the birth certificates of every soccer player in next month's World Cup tournament, you would most likely find a noteworthy quirk: elite soccer players are more likely to have been born in the earlier months of the year than in the later months. If you then examined the European national youth teams that feed the World Cup and professional ranks, you would find this quirk to be even more pronounced. On recent English teams, for instance, half of the elite teenage soccer players were born in January, February or March, with the other half spread out over the remaining 9 months. In Germany, 52 elite youth players were born in the first three months of the year, with just 4 players born in the last three.

What might account for this anomaly? Here are a few guesses: a) certain astrological signs confer superior soccer skills; b) winter-born babies tend to have higher oxygen capacity, which increases soccer stamina; c) soccer-mad parents are more likely to conceive children in springtime, at the annual peak of soccer mania; d) none of the above.

Anders Ericsson, a 58-year-old psychology professor at Florida State University, says he believes strongly in "none of the above." He is the ringleader of what might be called the Expert Performance Movement, a loose coalition of scholars trying to answer an important and seemingly primordial question: When someone is very good at a given thing, what is it that actually makes him good?

Ericsson, who grew up in Sweden, studied nuclear engineering until he realized he would have more opportunity to conduct his own research if he switched to psychology. His first experiment, nearly 30 years ago, involved memory: training a person to hear and then repeat a random series of numbers. "With the first subject, after about 20 hours of training, his digit span had risen from 7 to 20," Ericsson recalls. "He kept improving, and after about 200 hours of training he had risen to over 80 numbers."

This success, coupled with later research showing that memory itself is not genetically determined, led Ericsson to conclude that the act of memorizing is more of a cognitive exercise than an intuitive one. In other words, whatever innate differences two people may exhibit in their abilities to memorize, those differences are swamped by how well each person "encodes" the information. And the best way to learn how to encode information meaningfully,