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Why Being Short Can Help in Soccer

Unlike in other sports, some of soccer's biggest stars are small in stature.



Argentina's Diego Maradona dribbles past German players during the World Cup final match in 1986.

AP

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"It is not easy to find another contact sport which remains so open to smaller players," FIFA wrote in an article on its site after the last World Cup, which was titled "Little guys enjoying last laugh." I'm not sure I'd call soccer a "contact sport," but it's probably true that similarly small-statured players would not be laughing (or winning) quite as much in pro basketball or American football.

Indeed, among the game's other idiosyncrasies (no hands, **no sex**, team scarves), soccer seems to be one of the few major sports in which being big isn't a requirement for being good. Though professional soccer players are becoming taller over time, a recent study of European soccer players found that FC Barcelona, one of the best clubs, is also one of the shortest, at just five-foot-nine on average. The same study showed a tendency for the 11 most-picked players in a squad to be shorter than their teammates.

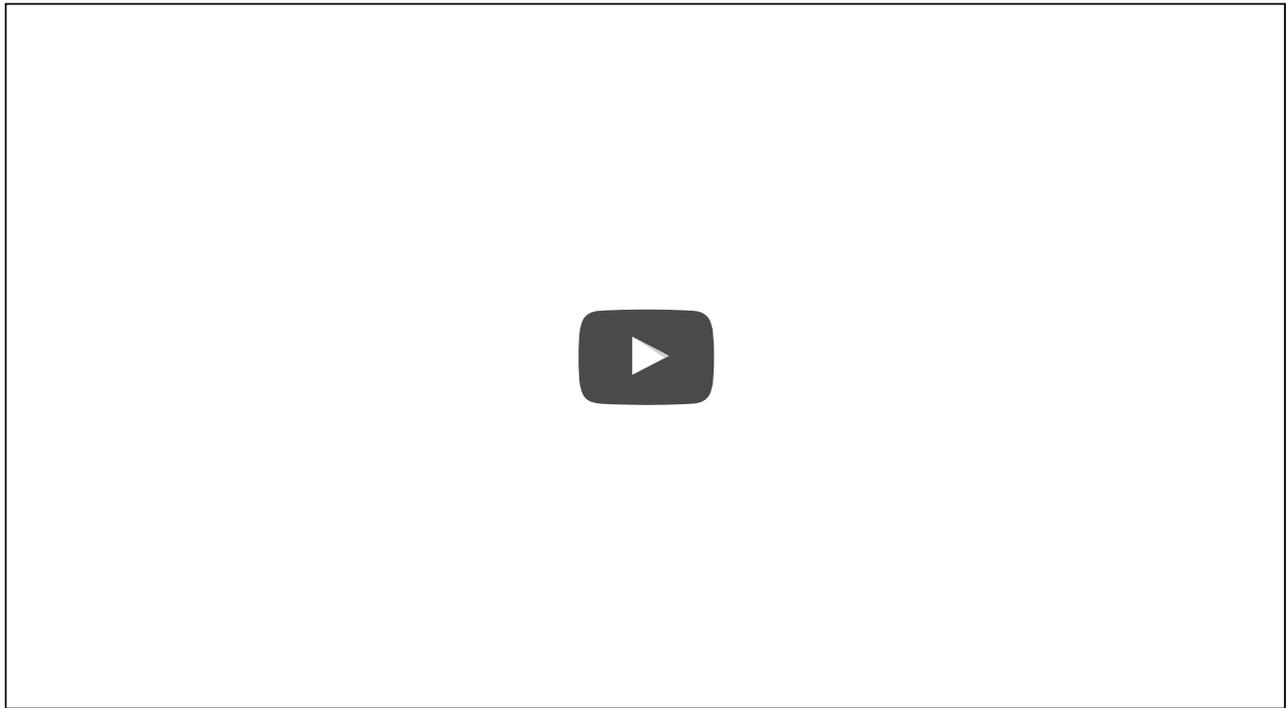
"I honed my physique to that of a little bison, ready for battle."

Some of the world's most celebrated players are fairly compact. Xavi Hernandez, who has won more trophies than any other Spanish player ever, is five-foot-seven, as is Andres Iniesta, who scored the winning goal against the Netherlands in the 2010 World Cup final. And several of the retired legends are somewhat diminutive, too—Brazil's Pele is five-foot-eight, and Argentina's Diego Maradona is just five-foot-five.

There are several reasons for the rise of soccer's little big stars, but the main one is that being close to the ground is a major advantage for midfielders and forwards. Shorter people have a "quicker stepping pattern," Stasinios Stavrianeas, a professor of exercise science at Willamette University, told me. Essentially, they're spry: They can change directions much faster than tall folks, and they have better control over their limbs.

"That's what makes them more elusive for the defender, and that's what makes them a better threat," Stavrianeas said.

Watch Maradona whip past five English players to score his famous goal in the 1986 World Cup:



Lionel Messi, the Argentine forward who has won four "Golden Ball" player of the year awards, is officially is five-foot-seven, but the *Wall Street Journal* suggests "that's an exaggeration."

Like Maradona, "Messi worms through tiny creases between defenders that few other players could squeeze through," the WSJ says. "His low center of gravity enables lightning-quick pivots that make him one of the planet's fastest dribblers."

When the data is crunched nationally, however, being shorter doesn't seem to be better for teams as a whole. Using numbers from [Achim Kemmerling](#) of the Central European University in Budapest, Chris Anderson of the [Soccer by the Numbers](#) blog plotted the average heights of male soccer players by country against the country's FIFA coefficient—basically a measure of how good they are at soccer. Countries above the line play better than their heights would predict; those below the line play worse:



Soccer by the Numbers

"To me, this tells a pretty powerful story; tall is good, and taller is generally better. The correlation is a robust .53," Anderson writes. That's good news for the U.S. national team, which averages **out to six feet**—two inches taller than the average American male.

What explains the trend? **While being stout and quick is good for offensive players, height is a distinct advantage for the other positions:** Goal keepers must cover as much physical area as possible, and it can help if defenders tower over their opponents, too.

"You'll find that if there's a corner kick, you'll see the defenders moving forward to try to hit the ball with their head" Stavrianeas said. "But then they scramble back to defense. **Not many tall players are good in the front.**"

Short players might have an easier time overall, too, because studies show tall players get called for fouls by referees more frequently—potentially because people associate height with aggression.

Anderson writes that among the teams on his chart, "There are some notable outliers, amongst them most obviously Spain, which lies way above the trend line." According to his chart, the Netherlands and Germany also perform unusually well—but unlike Spain, they're *taller* than average. And, as it happens, the three countries placed first, second, and third in the last World Cup.

That, of course, speaks to the power of the determined outlier: Cristiano Ronaldo, Portugal's six-foot-one star attacker, is one of the best in the world because of his blinding speed. Ronaldo (not to be confused with either Cristiano or Ronaldinho), the retired Brazilian who scored the most goals in World Cup history, is six feet. And the heights of the [top forwards and midfielders](#) "to watch" for this Cup are all over the map.

Messi, Xavi, and Iniesta all came up through Barcelona's La Masia youth academy, which had a lot to do with their success, as Anderson explained in an email:

For a number of years, players have been getting taller, and there was a time when midfielders especially seemed to be growing noticeably year by year. The effect was that the playing field seemed to be becoming smaller—more athletic giants roaming the field meant less space for players to pass the ball.

Barcelona especially—and therefore also Spain—did not follow this pattern. Why?

For one thing, in a tactical game like soccer, there is always value in doing things differently from everyone else. But I think the more prosaic answer is that they benefitted from two things. **First, the Barcelona style of playing relies on lots of short passes that require extremely good ball skills and passing skills.** Second, it also so happened that, at Barcelona, there was a golden generation of young players coming through their youth system who have played together since they were children, [such as the three aforementioned stars]. Their technical skills are among the

best in the world and their movements are automatized, and their ability to coordinate with one another and create passing triangles is what sets them apart. On a shrinking playing field, short players are able to navigate the space better IF their way of playing is keeping the ball on the ground. They have a lower center of gravity, are better able to stay on their feet, and play a so-called tiki-taka style around their ever-taller opponents.

So it was luck—a golden generation of unusually talented players—and design—a playing style focused on passing the ball through the midfield.

It's also possible that shorter players simply worked harder because they felt they had something to prove. As the five-foot-seven retired French defender Bixente Lizarazu told FIFA in 2011, as a youth he was told he was too small to go pro.

“But I’m no quitter. At the start of my career I weighed 69 kg (152 pounds) but at the end of every season I’d hit the gym, until I ended up weighing 75 kg (165 pounds). I honed my physique to that of a little bison, ready for battle,” he said.

“Sometimes those who start with everything in their favor end up not working hard enough. For us short guys, when we decide to do something we give it 120 percent.”

ABOUT THE AUTHOR



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