

SPORT: AN ACADEMIC'S PERFECT LABORATORY

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Big sporting events tend to bring out the armchair social scientists. For instance, when Europe advanced only three teams to the quarterfinals of this year's World Cup it was hailed by some as an indication of the decline Europe's geopolitical standing role, to the benefit of South America. That theory lasted only about as long as it took for Argentina and Brazil to fly home after losing to rivals from Old Europe. Similarly, Gideon Rachman of the *Financial Times* points to the columnist in Spain's *El País* who suggested that "England's loss to Germany over the weekend reflects Thatcherism's demoralising effects on the English proletariat.

(And there was I, thinking that it had something to do with lumbering centre-backs and a disallowed goal.)"

As much fun as it is to poke fun at sports-infused pseudo-social science, there is actually much of value to be gleaned from sports for understanding human behavior and important societal questions. For instance, in 2009 two scholars at the Wharton School of Business released a creative study of decision making among professional golfers to assess bias in decision making. The study utilized a data set of more than 2.5 million putts from 421 golfers over a period of five years. In the study the scholars wanted to see if there was any difference in putts made for par (what a golfer is supposed to score on a hole) versus birdie (one stroke less than par). The study found that for putts of equal length, professional golfers made putts for birdie at a rate less than for par. What is the reason for this difference? Golfers played more conservatively when putting for birdie knowing that a miss would lead to a par, whereas a missed putt for par left them with an unsavory bogey. The paper provided a robust confirmation of the notion of "loss aversion" in decision making. Like the rest of us, professional golfers would rather avoid a negative outcome than achieve a positive outcome with exactly the same quantitative value.

Golf, like many sports, provides an ideal setting for exploring understandings of human behavior and decision making: You have highly skilled and experienced decision making that occurs in a controlled setting, governed by known rules, and with an enormous amount of data available. Academics are rarely able to create such settings via research grants. Sport provides a ready-made laboratory for exploring a wide range of social and policy sciences questions.

Sport supplies an opportunity for exploring more qualitative questions as well. Consider the case of South African sprinter Oscar Pistorious who runs remarkably fast, perhaps too fast, on prosthetic legs. Should he be allowed to compete in the Olympics against other athletes? How is such a decision to be made? His circumstances raise important questions of fairness, equity, opportunity and, fundamentally, of the human condition.

Such questions often are found at the intersection of technology and society. In the Tour de France bicycle race, a distinction between trying to gain advantage through blood doping, which is very much against the rules, versus sleeping in a portable hyperbaric chamber, which is allowed, is a useful analogy for thinking about the differences between, for instance, manipulation of genetic make-up of crops through selective breeding versus advanced biotechnology. The use of technologies in sport is governed by many of the same cultural, political, and technical considerations that govern the acceptance of technologies in society more broadly.

Sport also affords a lens into political issues. Consider the debate that followed Luis Suarez of the Uruguayan football team, who in this summer's World Cup famously handled the ball as time expired, preventing a goal for Ghana and eventually setting in motion a series of events that would lead to Uruguay winning the match. Some were outraged at the action, complaining that the action was cheating. Others saw the action as a trade-off between violating the rules and accepting the sanction that followed, no different from an illegal slide tackle or, in American football,



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taking a pass interference penalty to prevent a touchdown. The situation provides an opportunity to analyze rules and norms governing societal behavior more broadly. Can every contingency be accounted for in rules? If formal sanctions are deemed unsatisfactory, are informal sanctions associated with violation of informal norms a substitute for rules?

Perhaps even more than the broader society, sport has seen the advancement of technology as something to be carefully regulated, with technological advance not necessarily seen as a good thing. Baseball uses wooden bats, when far more powerful metal bats are available. Similarly, the international swimming federation has banned high-performance swimming suits. Professional golf has banned clubs with certain grooves, and Formula One racing has very strict technological standards for its cars. Not all technological advances, simply by virtue of being advances, are welcomed in sport. In fact, it seems that the general bias in sports is to eschew most technological advances, even when they might make good sense - such as

putting a chip in a soccer ball to identify when it crosses the goal line.

Sports provide a valuable context for evaluating expertise, and not just among athletes but among those who purport to understand the dynamics of sporting events. For instance, ESPN, the US-based sports media enterprise, hosted a competition for predictions of the outcomes of the 2010 World Cup. Of the more than 1,000,000 entries submitted, only 10 percent would have improved on naïve predictions based on the transfer market-value of each team, i.e., assuming that the higher valued team would win each game. In fact, the "expert" predictions offered by the financial services firms Goldman Sachs, JP Morgan, and UBS fell only at the 61st, 67th, and 35th percentiles in the ESPN competition, respectively, all behind a naïve forecast based on FIFA World Rankings, which scored at the 70th percentile. What might this say about these firms' ability to predict market outcomes?

Sports offer a vast laboratory for exploring challenging questions in the quantitative and qualitative social sciences. Such questions have wider relevance for decision making in society, well beyond sport. In future years, expect more social scientists to turn their attention to the study of sports, and to draw lessons with much broader applications.

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