

## Teaching Current Directions in Psychological Science

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*Aimed at integrating cutting-edge psychological science into the classroom, Teaching Current Directions in Psychological Science offers advice and how-to guidance about teaching a particular area of research or topic in psychological science that has been the focus of an article in the APS journal Current Directions in Psychological Science. Current Directions is a peer-reviewed bimonthly journal featuring reviews by leading experts covering all of scientific psychology and its applications, and allowing readers to stay apprised of important developments across subfields beyond their areas of expertise. Its articles are written to be accessible to nonexperts, making them ideally suited for use in the classroom.*

### What Explains the Home-Field Advantage?

by David G. Myers

[Allen, M. S., & Jones, M. V. \(2014\). The “home advantage” in athletic competitions. \*Current Directions in Psychological Science\*, 23, 48–53.](#)

Hoping to capture our students' attention and to show psychology's significance, many of us love to relate psychology to students' interests and other courses. Thus, we seize opportunities to connect psychological science with literature, history, politics, religion, business, medicine, drama, music, and athletics. Yes, athletics. The most-watched TV programs, according to viewing statistics aggregated by Wikipedia, have been the 2014 Super Bowl (in the US), the 2010 Olympic gold medal hockey game (in Canada), the 2010 World Cup final (in Germany), the 1966 World Cup final (in Britain), the 2011 Rugby World Cup (in New Zealand), and the 2005 Australian Open tennis match (in Australia). Many people take their sports seriously.

Happily, sports offer multiple opportunities to teach and illustrate psychological science. We have concepts and evidence that help answer questions such as:

1. *Why do we care who wins?* When archrivals clash, the dynamics of social identification, of ingroup versus outgroup, of external threats and superordinate goals, and of “basking in reflected glory” play out (Myers, 2008).
2. *Do basketball shooters and baseball hitters display a “hot hand” by getting “in the zone”?* Do shooting and hitting actually display just the sort of streakiness that we should expect in random sequences? If so, then why do most players, coaches, and fans believe that streaks are nonrandom occurrences — implying that one should favor the player who's “in a groove” because “when you're hot you're hot” (Gilovich, Vallone, & Tversky, 1985, and many others since)?
3. *How does sleep influence motor skill learning and athletic performance?* And can sleep management boost athletic skill and performance, much as it helps consolidate other memories (Maas & Davis, 2013)?
4. *How do baseball, softball, and cricket fielders immediately and intuitively know where to run to intercept a fly ball* (McBeath, Shaffer, & Kaiser, 1995)?

5. *When and why do athletes choke under pressure? And what athletic behaviors are best performed automatically, without explicit thinking about one's actions (Baumeister, 1984; Schlenker et al., 1995)?*

To this list, Mark Allen and Marc Jones (2014) add another question — one ideally suited to class discussion: *Why is there a home-field advantage in team athletic competition?*

Sport	Years	Home games won
Nippon League Baseball (Japan)	1998–2009	53.6%
Major League Baseball (US)	1903–2009	53.9%
National Hockey League (US)	1917–2009	55.7%
International Rugby	1871–2009	56.9%
National Football League (US)	1966–2009	57.3%
International Cricket	1877–2009	57.4%
National Basketball Association (US)	1946–2009	60.5%
Women's National Basketball Association (US)	2003–2009	61.7%
English Premier League Soccer (UK)	1993–2009	63.0%
NCAA Men's Basketball (US)	1947–2009	68.8%
Major League Soccer (US)	2002–2009	69.1%

**Table 1. The home-field advantage**

Instructors could first present the facts. With some exceptions, home cooking is best (see Table 1, with data from Moskowitz & Wertheim, 2011, with similar data from a quarter million games reported by Jamieson, 2010).

Moreover, note Moskowitz and Wertheim, despite variations in rules and equipment, “the home-field advantage is almost eerily constant through time.” The differences by sport are remarkably stable. And NBA, NHL, and international soccer league teams have won more home games during every year, *with no exceptions*.

Does the home-field advantage continue to the present? As an activity, students could pick their favorite sport and check more recent data. For example, we Googled “MLB home away” and were taken to a website giving each Major League baseball teams’ home and away records for each of the last 3 years. Summing across teams, we found that the home teams won 52.6% of the time in 2011, 53.2% of the time in 2012, and 53.8% of the time in 2013. The three-year total — 53.2% home wins — nicely replicated the 53.9% result from the prior century.

So what gives? Whether in discussion groups or whole-class brainstorming, students will easily generate possible explanations identified by Allen and Jones and by others. Some will draw upon psychological influences:

1. *Social facilitation*. A supportive, intense home audience energizes high performance on well-learned skills (though if it causes self-consciousness it can also impede performance of skills best performed without thinking).

2. *Officiating bias*. Referees may not enjoy displeasing a crowd, and may use crowd noise as a decision-making heuristic. In one analysis of 1,530 German soccer matches, referees awarded an average of 1.80 yellow cards to the home team and 2.35 to the away team (Unkelbach & Memmert, 2010). Audience effects on officials also help explain why, in individual sports, subjectively evaluated performance — as in diving, gymnastics, and figure skating — garners the greatest home advantage (Jones, 2013).

3. *Travel fatigue*. Circadian rhythm matters. The NFL (2014) reports that, after flying to the East Coast for games, West Coast teams do fine playing Monday night — winning 21 of 35 games at a time that better suits their body clock's peak performance time. But they have won only 210 of 512 games that kick off at 1 p.m. — which better suits their opponents.

4. *Territoriality*. Some researchers consider the home advantage a natural protective response to territorial incursion, as evidenced by higher testosterone and cortisol levels before home soccer and ice hockey players' games.

Students may identify other less psychologically relevant explanations as well. These include:

- *Familiarity with the home context* (including cold for the Green Bay Packers, altitude for the Denver Broncos, and rain for the Seattle Seahawks).
- *Disruption from crowd noise*, as when the Seattle Seahawks' "12th man" crowd impedes opposing teams from hearing plays, or basketball fans jeer and wave arms to distract opposing free throw shooters.
- *Strategic advantages in some sports*, such as in baseball, where the home team bats last, with knowledge of what they need to do to win.
- *Weaker teams may more often travel to play stronger teams*. In 2014, Notre Dame will host Rice (a weaker team) in football, while traveling to play powerhouse Florida State.

Class discussion could also consider how to control for variables such as weather (by analyzing indoor games separately) or strategic advantage (by not including playoff games where the home team is higher seeded).

Ergo, sports are not only a big business, but also a big opportunity for psychology teachers to engage students. Sports psychology offers concepts that shed light on athletic phenomena such as the home-field advantage. And it offers critical thinking tools for sifting among possible explanations.

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