

Citation for published version: McEwan, D & Hoffmann, M 2021, Does a home disadvantage ever exist? in M Gomez-Ruano, R Pollard & C Lago-Penas (eds), *Home Advantage in Sport: Causes and the Effect on Performance.* 1st edn, Routledge, pp. 131-143. https://doi.org/10.4324/9781003081456-15

DOI: 10.4324/9781003081456-15

Publication date: 2021

Document Version Peer reviewed version

Link to publication

University of Bath

Alternative formats

If you require this document in an alternative format, please contact: openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Book Title: Home Advantage in Sport: Performance and Influence

Editors: Miguel Ruano, Richard Pollard, Carlos Lago

Publisher: Routledge/Taylor & Francis

Chapter Title: Chapter 9: Does a home disadvantage ever exist?

Authors: Desmond McEwan¹ & Matt D. Hoffmann²

Affiliations: ¹University of Bath; ²California State University, Fullerton

Mailing Address:

Dr. Desmond McEwan University of Bath Claverton Down 1 West 4.108 Bath, Somerset, United Kingdom BA2 7AY

Email: d.a.mcewan@bath.ac.uk

Twitter: @desmondmcewan

1 **1. Introduction**

2 Throughout this book, evidence of a home advantage has been discussed across a range of sports, competitive levels, timeframes, and geographical regions. Indeed, the bulk of the extant 3 4 research on the home advantage effect suggests that, overall, there is a benefit to competing at home versus away venues (e.g., Jamieson, 2010). Nonetheless, sport enthusiasts could likely 5 point to several instances where home teams tend to perform worse than away teams. Are these 6 7 merely examples of the adage that "the exception proves the rule" and simply part of the natural ebbs and flows of competition? Or, are there truly situations in sport whereby the advantage of 8 9 competing at home disappears or even reverses to a home *disadvantage*? 10 In this chapter, we attempt to dissect this area of research within the home (dis)advantage literature. We begin by highlighting the foundational work of Baumeister and Steinhilber (1984), 11 which proposed—and appeared to provide initial evidence of—a home disadvantage. We then 12 review the research that has been conducted since their initial work testing this phenomenon. 13 Finally, we provide a series of considerations for future research that could help advance this area 14 15 of study. To be clear, our goal in this chapter is not to convince readers that a home advantage in sport does not exist—such a contention would ignore the decades of evidence demonstrating that 16 athletes and sport teams tend to perform better at their home venue. Instead, we aim to delve into 17

18 the nuance that appears to exist in this home (dis)advantage effect.

19

20 **2.** Foundational research on the home disadvantage

Early work on the home disadvantage effect dates back over 35 years. Baumeister and Steinhilber (1984) proposed that supportive audiences (i.e., an athlete's home crowd) could undermine skilled performance under certain conditions as a result of increases in *selfpresentational concerns*. Self-presentation involves claiming desired identities through public

performances (Baumeister & Steinhilber, 1984). Self-presentational concerns can become salient
in front of supportive audiences (compared to hostile, unsupportive audiences), particularly as the
importance of a given performance increases. These increases in self-presentational concerns are
thought to amplify *self-awareness*, whereby individuals become increasingly focused on
themselves.

Why do self-presentational concerns and increased self-focus matter to sport performance? 30 31 There appear to be two potential explanations. First, in situations of high self-awareness, an athlete may become distracted away from important cues to which they typically attend and 32 33 towards the prospect of gaining a new identity instead. Second, these situations may engender greater conscious attention by the athlete to the step-by-step execution of well-learned skills 34 rather than carrying out those skills in their typical manner—a process that Masters et al. (1993) 35 referred to as "reinvestment". As an example, through years of learning, an expert golfer may 36 have reached a point in their development whereby each shot they take is rather "automatic" and, 37 thus, they focus solely on the golf ball when they swing their golf club. Under conditions where 38 self-presentational concerns and self-awareness are heightened (e.g., during the final hole of a 39 championship tournament where they are performing in front of a supportive audience and have 40 an opportunity to win), the golfer's focus may shift from being exclusively on the golf ball to (a) 41 42 their potential new identity as a "champion", and/or (b) the individual components involved in the swing (e.g., thinking about the strength of their grip on the golf club, bringing the club back 43 in a certain manner, shifting their weight across different positions and at particular times, and so 44 forth). 45

Based on the above theorizing, Baumeister and Steinhilber (1984) hypothesized that
athletes would perform worse during competitions that presented an imminent opportunity to win
a championship (thereby allowing the athletes to claim or redefine their identities as

3

"champions") in front of supportive home crowds compared to non-imminent competitions or in 49 front of non-supportive away crowds. From their perspective, it is the combination of *imminence* 50 and *audience support* that is particularly important in predicting performance decrements during 51 high-stakes competition. To test their propositions, Baumeister and Steinhilber (1984) conducted 52 an archival study of Major League Baseball (MLB) World Series games from 1924-1982 as well 53 as National Basketball Association (NBA) semi-final and final series games from 1967-1982. In 54 support of their hypotheses, they found that home teams in both sports were more likely to win 55 the first two games of the best-of-seven series (n = 98) which do not imminently decide the series 56 champion but lose the final game of the series, regardless of whether that final game was 57 58 delimited to games 5, 6, or 7 (n = 49) or to game 7 only (n = 26; see Figure 1). In addition, visiting team players were shown to make more fielding errors in the first two games of the MLB 59 series, but the home team made more in the 7th game.¹ Examined another way, the researchers 60 found that home team players showed a significant degradation in terms of the number of errors 61 made in the final game compared to their fielding performance in the first two games, whereas 62 the away team's performance was approximately unchanged. In further support of their 63 hypotheses, the researchers found that NBA home teams performed significantly better during 64 games 1-4 of a semi-final or championship series (n = 164) compared to the final game of the 65 66 series (n = 41); similar findings were shown when the final game was delimited to game 7 (n =13; see Figure 2). Moreover, home and away team players performed approximately equally in 67 terms of free-throw shooting during the first four games of the series; however, the away team 68 players had significantly better free-throw shooting percentages compared to home players during 69 the final game of the series. Finally, similar to the findings of fielding errors in MLB games, 70

¹ In their paper, the authors only presented data analyses on game 7 for this outcome measure; however, they noted that the "results are quite similar if we used all 5-, 6-, and 7-game series".

home team players showed significant decreases in free-throw percentages in the final game of 71 72 the series compared to the first four games, whereas the percentages for away team players did 73 not change during this timeframe. 74 [Insert Figure 1 and Figure 2 around here] In summary, Baumeister and Steinhilber (1984) concluded that NBA and MLB teams-and 75 individual athletes within those teams—performed worse when they were competing in front of a 76 77 home crowd and had an impending opportunity to secure the desired "champion" identity. The authors acknowledged that a direct test of the mechanisms underpinning this apparent home 78 79 disadvantage effect was not possible due to the study's archival design. Specifically, the 80 researchers were unable to determine whether the observed performance decrements by home athletes in win-imminent situations were due to (a) increases in distraction away from relevant 81 cues and towards irrelevant cues (i.e., claiming a new identity as a champion) and/or (b) increases 82 in *self-attention* wherein the athletes' execution of skill-based tasks moved away from 83 automaticity and towards a conscious, step-by-step attentional approach. Furthermore, the study 84 only included two sports, which raised questions regarding the generalizability of the findings. 85 Fortunately, research following Baumeister and Steinhilber's (1984) foundational work has 86 helped shed further light on the proposed home disadvantage effect. 87 88 3. What have we learned about the home disadvantage over the past 35 years? 89 90 [Insert Table 1 around here] Additional archival research demonstrated that the findings from Baumeister and 91

92 Steinhilber (1984) in the MLB and NBA were replicated in other sports (see Table 1 for

93 examples). For instance, Wright et al. (1995) showed that home teams were more likely to win

games 1 and 3 of best-of-seven National Hockey League (NHL) playoff series but lose the final

game (whether game 5, 6, or 7) of the series.² Archival data have also been examined in 95 individual sports. For example, Wright et al. (1991) found that British golfers who were in 96 contention to win the British Open Championship going into the final round of the tournament 97 had greater deteriorations in performance from the first to final round compared to contending 98 foreign/international players over this timespan. In an effort to move beyond archival findings, 99 Butler and Baumeister (1998) as well as Law et al. (2003) found that performance on various 100 101 mental (e.g., arithmetic) and physical (e.g., table tennis) tasks was generally poorer in front of supportive audiences (simulating a crowd at one's home venue) compared to unsupportive 102 audiences (simulating a crowd at an opposing team's venue). In explaining the existing research 103 104 on performance decrements due to audience support, Wallace et al. (2005) contended that (a) "audiences magnify both the rewards of success and the costs of failure". (b) a performer's 105 "motivation to achieve success may be eclipsed by their desire to avoid the penalties associated 106 with failure", and (c) "performers with supportive audiences simply have more to lose than other 107 performers with unsupportive audiences" (p.433). 108

In contrast to the above studies supporting Baumeister and Steinhilber's (1984) initial 109 work, a number of other studies actually pointed to a home *advantage* in high-pressure and/or 110 championship competitions. For instance, Leonard (1989) showed that athletes from a host 111 112 country of the Olympic Games won more medals than they did in either the immediately preceding or subsequent Olympic Games. In addition, Irving and Goldstein (1990) found that 113 MLB pitchers were more likely to pitch no-hitters (which is considered to be a near-perfect 114 115 performance by a baseball pitcher) at home than at an away venue. Perhaps most critically though were the studies by Schlenker et al. (1995) as well as Jones (2014) which updated and re-116

² Note. Higher-seed NHL teams host games 1, 2, 5, and 7; lower-seeded teams host games 3, 4, and 6.

analysed the data from Baumeister and Steinhilber (1984). In some cases, the evidence of a home 117 disadvantage that Baumeister and Steinbilber (1984) found was corroborated in the two later 118 studies. For example, Schlenker et al. (1995) found that visiting MLB players had nearly the 119 same number of errors in game 7 as they did in games 1 and 2, whereas home team players made 120 more errors in the seventh game compared to (a) the number of errors they made in games 1 and 121 2, and (b) the number of errors that away team players made in those seventh games. In other 122 123 cases, though, evidence of a home disadvantage was reduced or eliminated altogether. In particular, Jones (2014) found that home and away team percentages did not differ significantly 124 between Games 1 and 2 compared to the final games of MLB World Series. Furthermore, where 125 126 there was still evidence of a home disadvantage, this effect appeared to be largely driven by two variables that we will discuss later in this chapter. The first variable was the type of decisive game 127 a team is facing—that is, whether the game provided an opportunity for the home team to clinch 128 the series (i.e., when that home team had three wins) or to avoid losing the series (i.e., when the 129 opposing away team had three wins). For example, Schlenker et al. (1995) found that when the 130 home team was down 3-2 in the sixth game of a seven-game MLB series and, thus, facing 131 elimination (i.e., a loss-imminent game), they won 70% of the time; when they were up 3-2 in the 132 sixth game and, thus, had the opportunity to clinch the series with a win (i.e., a win-imminent 133 134 game), they only won 42% of the time.

The second variable related to differences in *team quality*. For example, Schlenker et al.
(1995) pointed out that although the home team in NBA series only won the sixth game of a
series 41% of the time, this sixth game was typically hosted by the team with the poorer regular

7

season record.³ Indeed, of the 23 games in which the lower-quality team hosted game 6, the home 138 team only won only eight (35%); of the five games that were hosted by the team with a better 139 regular season record, that home team won three (60%). As such, the authors argued that the 140 relatively poorer win percentages of the home teams in the potentially-decisive sixth games were 141 not due to those home teams "choking" per se but, rather, due to them simply being lower-level 142 teams. Indeed, the win percentage in these sixth games by the lower-quality team was nearly the 143 144 exact same as their win percentage in any series (36%) irrespective of court location. The findings from this study suggest that performing at home in decisive games does not necessarily 145 146 result in performance decrements; other variables that could influence differences in success rates 147 between home and away teams need to be taken into account (e.g., team quality, situational factors). 148

149

150 4. What are we still learning about the potential home disadvantage effect?

Since the seminal work of Baumeister and Steinhilber (1984), researchers have investigated the proposed home disadvantage in further detail in an attempt to clarify whether the effect truly exists and to tease apart its various influences. Below, we discuss six factors that have improved our understanding of the apparent inconsistencies in this phenomenon. For each, we also provide considerations for future work that could help continue to advance this area of research.

157 *Game type.* To help explain the contradictory evidence on the home (dis)advantage,

researchers need to move beyond simply comparing the overall success between home and away

³ The NBA's playoff structure has changed over the years. As a result, although the team with the better regular season record currently hosts games 1, 2, 5, and 7 of a series, there have also been years when they hosted games 1, 2, 6, and 7.

teams. Instead, examining performance across specific types of games—especially in 'best-of' 159 160 competition formats—could provide a more complete evaluation of the propositions advanced by Baumeister and Steinhilber (1984). For example, multiple studies (e.g., Baumeister & 161 Steinhilber, 1984; Jones, 2014; Schlenker et al., 1995; Wright et al., 1995) have compared home 162 and away team win percentages in early games of a best-of-seven series versus later or final 163 games. As others have pointed out (e.g., McEwan, 2019; Schlenker et al., 1995; Tauer et al., 164 165 2009), the precise circumstances of the (potentially) decisive games of a series need to be considered. For example, in a best-of-seven series, the "final game" of a series implies that the 166 167 home team, away team, or both teams have an opportunity to clinch a series. More specifically, 168 this final game could involve: the home team leading the series 3-0, 3-1, or 3-2; the visiting team leading 3-0, 3-1, or 3-2; or the series being tied 3-3, with both home and away teams having a 169 chance to clinch the series with a win. Comparing team performance in various types of games 170 such as these provides a more detailed understanding of the home (dis)advantage, rather than 171 simply measuring performance in "early" versus "late" games (e.g., games 1 and 2 versus the 172 173 final game of the series). One recent example of this type of assessment stems from McEwan (2019) who 174

compared home and away team success across several types of NHL playoff overtime games.
These games were first broken down into non-outcome-imminent games—wherein neither team
could clinch the series with a win—and outcome-imminent games—where at least one team
could clinch the series. In terms of win percentages, no significant differences were evident
between home and away teams for outcome-imminent games.⁴ However, when the outcomeimminent games were further broken down into home-win-imminent or away-win-imminent (i.e.,

⁴ Note that non-imminent games was used as a baseline comparison in this study.

where the home or away team, respectively, was leading 3-0, 3-1, or 3-2 and, thus, had an 181 opportunity to clinch the series), some interesting findings emerged. Specifically, when the away 182 teams had an imminent opportunity to clinch the series, they won significantly more games than 183 home teams.⁵ In contrast, when home teams had an imminent opportunity to clinch the series. 184 they were no more likely than away teams to win the overtime game⁵—this latter finding aligned 185 with the results from Jones (2014), who demonstrated that home teams won approximately the 186 187 same number of game sevens as they did games 1 or 2 in MLB, NBA, and NHL semi-finals and finals series. Tauer et al. (2009) took another approach to examining the home (dis)advantage in 188 189 NBA playoff games—they compared home and away team performance in outcome-imminent 190 games wherein the series was tied 3-3 or one team had a 3-2 or 3-1 series lead. Relative to their performance in the first two games of a series, home team win percentages were: poorer in game 191 5 of the series when leading 3-1; poorer in game 6 when leading 3-2; no different in game 5 when 192 trailing 3-1; higher in game 6 when trailing 3-2; and higher in game 7 when the series was tied 3-193 3. Had the outcome-imminent games in these two studies not been further broken down, some 194 195 valuable information on the home (dis)advantage in ice hockey and basketball would have been overlooked. As such, researchers are encouraged to consider the specific type of game that 196 competitors are faced with in outcome-imminent games. 197

Situations within games. In addition to comparing performance in various types of games, researchers could also consider home and away team performance in specific situations within those games. For instance, Heaton and Sigall (1989) re-examined the MLB data from Baumeister and Steinhilber's (1984) study and sought to better understand how the differences in home and away team success emerged in the final game of a tied series. They found that home teams were more likely to fall behind and never take a lead in game 7, relative to the likelihood of this occurring during the first six games. More recently, Hoffmann et al. (2017) compared

205 home and away team win percentages in NHL regular season games (2005-06 through 2013-14) 206 based on the specific situation in which a game ended—regulation (i.e., three 20-minute periods of 5-on-5 play), overtime (i.e., five minutes of extra time [4-on-4 play] when there is no winner 207 208 following regulation), or shootouts (i.e., one-on-one breakaways between a shooter and the goaltender when there is still no winner following overtime; shootouts continue until a winner is 209 210 decided). They found that home teams that were superior to their visiting counterparts had 1.03 211 times greater odds of winning when the game concluded in regulation versus overtime. In 212 contrast, there was a significant decrease in the home team's odds of success when the game 213 transitioned into the more individually-oriented shootout situation, regardless of the relative 214 quality of home versus visiting teams. Specifically, home teams' odds of winning were 1.23 215 times greater when the game ended in overtime rather than the shootout. These findings were reflected in the following average home team win percentages: games ending in regulation 216 (57%), games ending in overtime (54%), and games ending in the shootout (48%). In sum, it 217 218 seemed that home team performance suffered as the situation within the competition became 219 increasingly imminent and determined by individual skill.

In the 2015-16 NHL season, the league modified the overtime format to consist of 5-220 221 minutes of 3-on-3 hockey (as opposed to the earlier 4-on-4 format), followed still by a shootout if 222 required. Hoffmann et al. (in press) sought to replicate the analysis from the 4-on-4 overtime era (i.e., Hoffmann et al., 2017) using regular season game data for the four NHL seasons since the 223 224 implementation of 3-on-3 overtime (2015-16 through 2018-2019). One noteworthy finding was 225 that home teams that were clearly superior to their visiting opponents had a substantially better home winning percentage when games ended in regulation (77%) compared to overtime (53%), 226 perhaps suggesting that the home advantage might decline during situations when there is a 227 greater emphasis on individual play (i.e., during overtime periods). This finding was also 228

demonstrated through a significant interaction, which showed that superior home teams were
4.24 times more likely to win than inferior home teams when games concluded in regulation
rather than overtime.

Returning to the seminal work by Baumeister and Steinhilber (1984), it is "the imminent 232 opportunity to claim a desired identity in front of a supportive audience" (p. 85; emphasis added) 233 that is proposed to result in performance decrements for home team athletes. In most sports, there 234 235 will be differences across situations within a competition in terms of the imminence in deciding a 236 winner (e.g., a basketball player who takes a jump-shot in the waning seconds of a 1-point game 237 versus an earlier point of a game). Moreover, in various scenarios where the outcome of the 238 competition is looming, the salience of claiming the "ultimate" identity (i.e., as a "champion") is further amplified in championship games versus non-championship games (e.g., game 7 of a 239 basketball series versus a regular season game). As such, a more thorough understanding of the 240 home (dis)advantage will be obtained as researchers continue to not only consider game type but 241 242 also break those games down into specific types of situations.

Types of sport and type of skills. The home advantage has been found to be moderated by 243 sport type. For example, sports that are more "continuous" in their scoring and temporal nature 244 (e.g., basketball, ice hockey) generally demonstrate stronger home advantages than sports that 245 246 have discrete breaks embedded over the course of the game (e.g., baseball, American football; Pollard & Pollard, 2005; Tauer et al., 2009). Further, whereas a home advantage has been 247 historically reported in team sports, findings typically demonstrate that "objectively evaluated" 248 249 individual sports (e.g., tennis, golf) show comparatively weaker evidence of a home advantage (Jones, 2013). This finding may be useful to consider when reflecting on the performance of 250 home versus away players in individually-oriented situations that occur within team sport, such 251 as penalty kicks in football or shootouts in ice hockey. Jones (2013) did, however, report that 252

individual sports that are "subjectively judged" tend to demonstrate significant home advantages 253 254 (e.g., figure skating, gymnastics). Thus, might sport type also impact the potential home *disadvantage* effect that could arise during outcome-imminent situations? 255 256 In many sports, there are also certain player positions or times during competition where performance is more skill-based (e.g., a quarterback or receiver in American football) compared 257 to others that a more effort-based (e.g., an offensive or defensive lineman in American football). 258 259 Some researchers have suggested that skill-based tasks are more prone to performance 260 decrements under pressure compared to effort-based tasks (e.g., Wallace et al., 2005). This might 261 imply that home athletes are more likely to choke when performing offensive tasks which tend to 262 be more skill-based (e.g., a field hockey player attempting to score near the end of a tied game) compared to defensive tasks which tend to be more effort (e.g., a field hockey player attempting 263 to block the opposing team's shot near the end of a tied game). Despite being proposed as 264 additional potential moderators (see Wallace et al., 2005), there is scant empirical evidence that 265 these variables (skill-/effort-based tasks, offensive/defensive skills) play a role in predicting a 266 home disadvantage. As such, future research examining these potential moderating variables is 267 clearly warranted. 268

Team quality. While it is beyond the scope of this chapter to delve deep into the 269 270 measurement of team quality as it pertains to the home advantage (readers are instead directed to 271 Chapter 2), we would generally encourage greater consideration of this variable as a potential 272 moderator in future home (dis)advantage work. Schwartz and Barsky's (1977) pioneering study 273 demonstrated that some teams benefitted from a particularly strong home advantage by virtue of their quality relative to their visiting opponents. That is, some home teams were able to exploit 274 the advantages of playing at home because of the inferiority of their opponents. Since that 275 discovery, home (dis)advantage researchers have adjusted for athlete and team quality in their 276

studies using different approaches. For instance, Clarke and Norman (1995) used a method that 277 278 estimated home advantage and team quality simultaneously based on goal margins. Hoffmann et al. (2017) accounted for team quality using a formula grounded in the Pythagorean Method that 279 approximated an NHL team's winning percentage based on goals scored and goals allowed. 280 Moving forward, home (dis)advantage researchers should think critically in terms of 281 identifying situations in which confounding elements related to team/athlete quality may impact 282 283 study results. For example, any research examining 'best of' playoff series would benefit from the inclusion of a team quality variable. In many sport leagues (e.g., NHL, NBA, MLB) better 284 285 teams (based on regular season play) are seeded higher in playoff rankings and ostensibly benefit 286 from having more home games in a playoff series as a result. Hence, it is possible that differences in home and away team success can be explained (at least to some extent) by the winning team 287 simply being of higher quality as opposed to psychological changes related to the home 288 (dis)advantage phenomenon (e.g., increases in distraction and/or self-awareness). As such, a 289 290 more consistent consideration for team quality would help better identify the precise reasons why 291 differences in home and away team success emerge.

Individual athlete influences. Our understanding of the home disadvantage effect could 292 be further extended by considering individual athlete differences. In particular, examining 293 294 personality and/or trait-based influences could provide interesting insight into whether certain athletes are more (or less) susceptible to choking at home. For example, Wallace et al. (2005) 295 argued that athletes with higher levels of narcissism would be less likely to choke under the 296 297 pressure of a supportive audience. Since those with narcissistic characteristics have a propensity for grandiosity, self-aggrandizing behavior, and inflated self-evaluations, it is possible that 298 299 athletes would maintain their confidence when faced with pressure-filled, outcome-imminent situations in front of supportive audiences. To our knowledge, there is little sport research linking 300

narcissism to performance under pressure (e.g., Geukes et al., 2012). Nonetheless, a series of
studies published in the early 2000's did find that narcissists thrived on performance tasks when
there were "self-enhancing" opportunities (Wallace & Baumeister, 2002). For instance, in one of
these studies, individuals with high narcissism scores who were told that their dart-throwing task
was designed to identify choking under pressure performed better than those with low narcissism
scores. Future researchers could attempt to replicate this finding using performance tasks more
relevant to high-performance sport (e.g., basketball free-throws).

Another future research direction is to expand beyond narcissism and examine other 308 309 personality traits such as the 'Big Five' (i.e., extraversion, agreeableness, neuroticism, 310 conscientiousness, and openness to experience) in relation to performance under pressure. Although not within a sport setting, one study found that higher levels of neuroticism (i.e., 311 feelings of anxiety, worry, and emotional instability) predicted decreased performance on a high-312 pressure decision-making task (Byrne et al., 2015). Gaining a better appreciation of athletes' 313 personalities and how they may relate to performance in outcome-imminent situations in front of 314 one's home crowd would not only enhance our understanding of the home disadvantage effect 315 but could also have implications for coaches and applied sport psychology practitioners. 316

Mechanisms of the home (dis)advantage. Perhaps the largest hole that remains within the 317 318 home disadvantage literature involves understanding the mechanisms of this proposed effect. As discussed at the outset of this chapter, Baumeister and Steinhilber (1984) contended that the 319 effect of outcome-imminent situations in front of supportive crowds on task performance could 320 be explained by self-presentational concerns and increases in self-awareness. Although they did 321 indeed find differences in performance between home and away teams over the course of a 322 basketball or baseball series, the researchers were unable to test whether those mechanisms 323 explained the performance outcomes. Subsequent archival research that contradicted these 324

findings (e.g., Jones, 2014; Schlenker et al., 1995) also did not test these potential mechanisms. 325 326 In other words, when competing at one's home venue, does a change in imminence lead to a change in performance via changes in self-presentational concerns and/or self-awareness? The 327 328 answer to this question is still not completely clear. Future studies that test this mediating effect could help refine this area of research and clarify the contradictory evidence that exists. For 329 example, the findings supporting a home disadvantage effect under certain conditions might 330 331 indeed be explained by increases in self-awareness among home competitors. For studies that do 332 not support the home disadvantage effect, it may be that performance decrements did not occur 333 because the changes in imminence were not substantive enough to induce increases in self-334 awareness. In either case, the point stands that there is simply not a sufficient level of evidence to make an accurate conclusion on this point. 335

To test the potential mechanisms of the home (dis)advantage, future research will need to 336 make use of study designs beyond archival research. That work would not only help uncover why 337 some studies have found a home disadvantage and others have not, but could also be useful to 338 applied sport psychology practitioners. For example, if performance decrements resulting from 339 particular situations are indeed explained by changes in self-presentational concerns, practitioners 340 could identify upcoming situations when a home disadvantage could potentially take place (e.g., 341 342 in a win-imminent game of a series) and encourage athletes to utilize certain psychological or behavioural strategies that could help offset those concerns from occurring or reducing their 343 detrimental impact on performance if they do indeed take place. 344

345

5. Conclusion

347 As detailed throughout this book, generally there is an advantage to competing at one's348 home venue. That said, there is evidence to suggest that there may be certain outcome-imminent

- evidently needed to better understand the mechanisms underpinning the home (dis)advantage, as
- 351 well as the range of variables that may moderate this effect. One conclusion that could be made at
- this point though is that the home (dis)advantage is a nuanced phenomenon that seems to be far
- 353 from resolved.

354

355 References 356 Baumeister, R. F., & Steinhilber, D. (1984). Paradoxical effects of supportive audiences on performance under pressure: The home field disadvantage in sports championships. Journal 357 358 of Personality and Social Psychology, 47, 85-93. Butler, J. L., & Baumeister, R. F. (1998). The trouble with friendly faces: Skilled performance 359 with a supportive audience. Journal of Personality and Social Psychology, 75, 1213-1230. 360 361 Byrne, K. A., Silasi-Mansat, C. D., & Worthy, D. A. (2015). Who chokes under pressure? The Big Five personality traits and decision-making under pressure. *Personality and Individual* 362 363 Differences, 74, 22-28. 364 Clarke, S. R., & Norman, J. M. (1995). Home ground advantage of individual clubs in English soccer. The Statistician, 44, 509-521. 365 Gayton, W. F., Steinroeder, W., Bonnica, C., & Loignon, A. C. (2009). An investigation of home 366 disadvantage in Davis Cup tennis. Perceptual and Motor Skills, 109, 382-386. 367 Gayton, W. F., Theriault, L. A., & Morneau, P. G. (2013). An Investigation of Home 368 Disadvantage in Fed Cup Tennis. Journal of Sport Behavior, 36, 257-263. 369 Geukes, K., Mesagno, C., Hanrahan, S. J., & Kellmann, M. (2012). Testing an interactionist 370 perspective on the relationship between personality traits and performance under public 371 372 pressure. Psychology of Sport and Exercise, 13, 243-250. Heaton, A. W., & Sigall, H. (1989). The "championship choke" revisited: The role of fear of 373 acquiring a negative identity. Journal of Applied Social Psychology, 19, 1019-1033. doi: 374 375 10.1111/j.1559-1816.1989.tb01236.x Hoffmann, M. D., Loughead, T. M., Dixon, J. C., & Crozier, A. J. (2017). Examining the home 376 advantage in the National Hockey League: Comparisons among regulation, overtime, and 377 the shootout. Psychology of Sport and Exercise, 28, 24-30. 378

379	Hoffmann, M. D., McEwan, D., Baumeister, R. F., Barnes, J. D., & Guerrero, M. D. (in press).
380	Home team (dis)advantage patterns in the National Hockey League: Changes through
381	increased emphasis on individual performance with the 3-on-3 overtime rule. Perceptual
382	and Motor Skills, ahead-of-print.
383	Jamieson, J. P. (2010). The home field advantage in athletics: A meta-analysis. Journal of
384	Applied Social Psychology, 40, 1819-1848.
385	Jones, M. B. (2013). The home advantage in individual sports: An augmented review.
386	Psychology of Sport and Exercise, 14, 397–404.
387	Jones, M. B. (2014). The home disadvantage in championship competitions: Team sports.
388	Psychology of Sport and Exercise, 15, 392-398.
389	Law, J., Masters, R. M., Bray, S., Eves, F. F., & Bardswell, I. (2003). Motor performance as a
390	function of audience affability and metaknowledge. Journal of Sport and Exercise

391 *Psychology*, 25, 484-500.

- Leonard, W. M. (1989). The "home advantage": The case of the modern Olympiads. *Journal of Sport Behavior*, *12*, 227-241.
- 394 Masters, R.S.W., Polman, R.C.J., & Hammond, N.V. (1993). 'Reinvestment': A dimension of

personality implicated in skill breakdown under pressure. *Personality and Individual Differences*, *14*, 655-666.

- 397 McEwan, D. (2019). A home advantage? Examining 100 years of team success in National
- Hockey League playoff overtime games. *Psychology of Sport and Exercise*, *43*, 195-199.
- 399 McEwan, D., Martin Ginis, K. A., & Bray, S. R. (2012). "With the game on his stick": The home
- 400 (dis)advantage in National Hockey League shootouts. *Psychology of Sport and*
- 401 *Exercise*, *13*, 578-581.

402	Pollard, R., & Pollard, G. (2005). Long-term trends in home advantage in professional team	
403	sports in North America and England (1876–2003). Journal of Sports Sciences, 23, 337-	
404	350.	
405	Schlenker, B. R., Phillips, S. T., Boniecki, K. A., & Schlenker, D. R. (1995). Championship	
406	pressures: Choking or triumphing in one's own territory? Journal of Personality and Social	
407	Psychology, 68, 632-643.	
408	Schwartz, B., & Barsky, S. F. (1977). The home advantage. Social Forces, 55, 641-661.	
409	Tauer, J. M., Guenther, C. L., & Rozek, C. (2009). Is there a home choke in decisive playoff	
410	basketball games? Journal of Applied Sport Psychology, 21, 148-162.	
411	Wallace, H. M., & Baumeister, R. F. (2002). The performance of narcissists rises and falls with	
412	perceived opportunity for glory. Journal of Personality and Social Psychology, 82, 819-	
413	834.	
414	Wallace, H. M., Baumeister, R. F., & Vohs, K. D. (2005). Audience support and choking under	
415	pressure: A home disadvantage? Journal of Sports Sciences, 23, 429-438.	
416	Wright, E. F., Jackson, W., Christie, S. D., McGuire, G. R., & Wright, R. D. (1991). The home	
417	course disadvantage in golf championships: Further evidence for the undermining effect of	
418	supportive audiences on performance under pressure. Journal of Sport Behavior, 14, 51-60.	
419	Wright, E. F., Voyer, D, Wright, R. D., & Roney, C. (1995). Supporting audiences and	
420	performance under pressure: The home-ice disadvantage in hockey championships. Journal	
421	of Sport Behavior, 18, 21.	
422		



Figure 1. Win percentages in MLB World Series games from 1924-1982 (Baumeister & Steinhilber, 1984).



Figure 2. Win percentages in NBA semi-final and final championship games from 1967-1982 (Baumeister & Steinhilber, 1984).

Table 1

Summaries of key studies providing evidence in support of a home disadvantage effect since Baumeister and Steinhilber's (1984) seminal research.

Study	Main Findings
Butler & Baumeister (1998)	In three laboratory-based experiments, performance on difficult mental arithmetic and video game tasks was poorer for participants who completed the task in front of supportive audiences compared to unsupportive audiences.
Gayton et al. (2009)	In best-of-five Davis Cup tennis matches (1900-2007), home teams were significantly more likely to win games 1 and 2 of the series compared with game 5 (although no significant differences were found when comparing games 1 and 2 with games 4 and 5).
Gayton et al. (2013)	In best-of-five Fed Cup golf matches (1995-2010), home teams were significantly more likely to win games 1 and 2 of the series compared with game 5 (although no significant differences were found when comparing games 1 and 2 with games 4 and 5).
Law et al. (2003)	In a laboratory-based study, performance on a table tennis task was worse when participants performance in front of a simulated home (i.e., supportive) audience compared to a simulated away (i.e., adversarial) audience or observation-only condition.
Wright et al. (1991)	From 1946-1980, performances of contending British and Irish players in the British Open decreased significantly more than those of contending international golfers from round one to round four. These differences were maintained when the golfers' skill levels and experience were considered.
Wright et al. (1995)	Home teams were more likely to win games 1 and 3 of a best-of-seven NHL playoff series (1960-1993) but lose the final game of the series (whether the final game was the fourth, fifth, sixth, or seventh game of the series)