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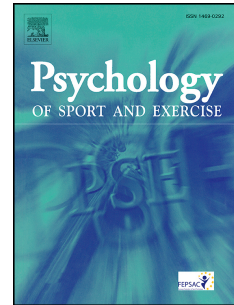
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A home advantage? Examining 100 years of team success in National Hockey League playoff overtime games

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Title: A home advantage? Examining 100 years of team success in National Hockey League playoff overtime games.

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Abstract (Brief Report)

Objectives: To examine a potential home (dis)advantage in various types of playoff overtime games in the National Hockey League (NHL).

Design: Archival.

Method: Success rates for home and away teams in win-imminent overtime games (i.e., wherein a team has an opportunity to win the playoff series) were compared to their respective success in non-imminent overtime games (i.e., the outcome of the game does not determine the outcome of the series).

Results: When away teams had an opportunity to win a series, they were significantly more likely to win an overtime game compared to home teams. No such advantage was evident for home teams when they had an opportunity to win a series.

Conclusions: When an NHL team has an opportunity to win a playoff series, there appears to be an advantage for visiting teams—not home teams—in winning an overtime game.

Keywords: championship; choke; clutch; home advantage; pressure; self-attention

1 A home advantage? Examining 100 years of team success in National Hockey League playoff
2 overtime games

3 Over the past few decades, the ‘home advantage’ phenomenon has been examined within
4 dozens of studies (e.g., Carron, Loughhead, & Bray, 2005; Courneya & Carron, 1992; Jamieson,
5 2010; Jones, 2014; Nevill & Holder, 1999). Early research suggested that there was a benefit to
6 competing at one’s home venue in light of “the consistent finding that home teams in sport
7 competitions win over 50% of games played under a balanced home and away schedule”
8 (Courneya & Carron, 1992, p. 14). Indeed, a meta-analysis by Jamieson (2010) found that teams
9 who competed at home won 60% of athletic contests, which was significantly larger than what
10 would be expected from chance. This home advantage was generally evident across a range of
11 sports (e.g., soccer, basketball, ice hockey), competitive levels (e.g., collegiate and professional
12 teams), and various types of games (e.g., regular-season and championship).

13 The differences between home and away team success are hypothesized to emerge due to
14 game location factors—including advantages with regard to travel, rules, learning, and crowd
15 noise—leading to changes in psychological, physiological, and behavioural states among athletes,
16 coaches, and officials (Allen & Jones, 2014; Carron et al., 2005; Courneya & Carron, 1992).
17 Various experimental studies have provided support for these hypotheses. For example,
18 Unkelbach and Memmert (2010) found that soccer referees who watched scenes from matches in
19 which a foul had been committed were more likely to hand out yellow cards if the crowd noise
20 (which was manipulated by the researchers) was high compared to those who watched the same
21 scene but under conditions of low crowd noise. In addition, Staufenbiel, Lobinger, and Strauss
22 (2015) found that soccer coaches set more challenging team goals, had higher expectations that
23 their teams would win, and were more likely to choose offensively-aggressive playing tactics if
24 their team was playing at home compared to away team coaches. Additional studies have also

25 shown that hormones such as testosterone and cortisol levels are also higher when athletes
26 perform at home rather than at an away venue (e.g., Carré, Muir, Belanger, & Putnam, 2006),
27 which could reflect an inherent protective response within human species to territorial
28 intrusions/threats (cf. Neave & Wolfson, 2003).

29 In contrast to the advantage that is typically evident amongst home teams, it has been
30 hypothesized that there may be certain situations in sport whereby this advantage disappears and
31 even reverses (Baumeister & Steinhilber, 1984). Specifically, in the first test of a potential home
32 *disadvantage*, Baumeister and Steinhilber (1984) proposed that home crowds may present a
33 source of pressure for home teams and, thereby, undermine performance when there is an
34 imminent opportunity to win a competition—a phenomenon that they labelled as the “home
35 choke”. The authors found that in the World Series of Major League Baseball (MLB) from 1924
36 – 1982, home teams were more likely to win the first four games but less likely to win the final
37 three games of the best-of-seven series, including 16 of the 26 games (61.5%) over that timespan
38 that required a seventh game to decide the series. To explain these findings, the authors suggested
39 that the “imminent opportunity to claim a desired [winner’s] identity in front of a supportive
40 audience might engender a state of self-attention that could interfere with the execution of skillful
41 responses” (Baumeister & Steinhilber, 1984, p. 85). Complimentary research focused on choking
42 under pressure has helped shed further light on the potential mechanisms that might explain how
43 performance pressure (such as that induced by supportive crowds) can negatively impact athletes.
44 Specifically, high-pressure situations can undermine performance by disrupting the automaticity
45 that typically governs the execution of well-learned skills, and increasing individuals’ self-
46 consciousness, anxiety, and attention to distracting stimuli (Allen & Jones, 2014; Beilock &
47 Gray, 2007). Supportive crowds in particular have been found to result in individuals executing
48 their skills in an overly cautious manner (Butler & Baumeister, 1998).

49 Since the seminal research by Baumeister and Steinhilber (1984), various lab-based (e.g.,
50 Butler & Baumeister, 1998; Law, Masters, Bray, Eves, & Bardswell, 2003) and archival studies
51 (e.g., McEwan, Martin Ginis, & Bray, 2012; Wright, Voyer, Wright, & Roney, 1995) have
52 provided support for the notion of a home disadvantage—and corresponding away advantage—
53 during various “outcome-imminent” situations (e.g., a last-second shot, the final/decisive game of
54 a league’s championship series). As opposed to comparing overall differences in the success rates
55 of competitions between home and away teams (which arguably provides an incomplete and
56 perhaps too simplistic account of this phenomenon), examining performance in certain types of
57 games or in various situations within that game can help provide a more specific test of the home
58 (dis)advantage. For example, Hoffman, Loughead, Dixon, and Crozier (2017) examined
59 differences in win percentages between home and away teams across NHL games that ended in
60 regulation, overtime, and shootouts. They found that the odds of winning were significantly
61 higher for away teams compared to home teams when the game concluded in a shootout rather
62 than in overtime. As another example, McEwan et al. (2012) analyzed differences in shot
63 percentages between home and away teams across various situations within NHL shootouts. They
64 found that there were no significant differences between home and away shooters in overall shot
65 percentages or in shot percentages where teams faced some sort of outcome-imminent situation—
66 that is, where the result of a shot could potentially determine the outcome of the game. However,
67 in ‘win-imminent’ situations, there was a home *disadvantage* such that away shooters were more
68 likely than home shooters to score in situations where they could win the game for their
69 respective team if the player scored a goal on his current shootout attempt.

70 In addition to assessing differences in success rates between home and away teams in NHL
71 regular season overtimes and shootouts (and the various situations within those shootouts), the
72 NHL’s playoff format may also be particularly useful in examining the home (dis)advantage. The

73 league's playoff format is unique compared to other professional sport in two particular ways.
74 First, it is one of the three major professional sports—along with Major League Baseball (MLB)
75 and the National Basketball Association (NBA)—where the competition between teams during
76 league playoffs is decided by multiple games in a 'best-of' format (with most series in these
77 leagues now following a best-of-seven-games format). In contrast, other sports leagues (e.g.,
78 National Football League) only have one game during their championship playoff rounds to
79 decide a winner. The format of NHL playoff hockey differs further from the MLB and NBA, in
80 that NHL overtimes follow a 'sudden death' format for both teams during playoffs. Specifically,
81 when a playoff game is tied after regulation time (60 minutes over three periods), the game goes
82 to overtime and the first team to score a goal wins the game. In contrast, teams play a five-minute
83 overtime in NBA games; in MLB, if the away team scores a run in extra-innings (i.e., at the 'top'
84 of the inning), the home team is still given an opportunity to tie or win the game (i.e., at the
85 'bottom' of the inning). Hence, with the NHL's playoff format, researchers can compare home
86 and away teams' success of various types of outcome-imminent games. In addition, the sudden-
87 death format of tie games further amplifies the imminence of these games. That is, while teams in
88 other professional sports leagues still have an opportunity to tie and win a game if the opposing
89 team scores, NHL teams are not afforded the same opportunity—rather, scoring a goal results in
90 an immediate win, while allowing a goal results in an immediate loss.

91 The purpose of the current study was to examine win-loss records for home and away teams
92 during NHL playoff overtime games. Informed by previous research on the home (dis)advantage,
93 four specific hypotheses were tested. First, guided in part by the findings noted above by
94 McEwan et al. (2012) regarding success rates in outcome-imminent situations, it was
95 hypothesized that there would be no home or away advantage in outcome-imminent games
96 overall. That is, when at least one of the teams had an opportunity to win the series by scoring a

97 goal in overtime, no significant differences in win percentages between home and away teams
98 were expected (hypothesis 1). However, it was hypothesized that away teams would win
99 significantly more overtime games than home teams in games where those away teams had an
100 imminent opportunity to win a series (hypothesis 2). No such advantage was anticipated for home
101 teams in these types of overtime games. That is, no significant differences in win-loss records
102 were expected between home and away teams in overtime games wherein the home team had an
103 opportunity to win a series (hypothesis 3). The final game of a series presents a unique situation
104 in the sense that *both* teams have an imminent opportunity to win a series. In light of the findings
105 from previous studies on win percentages in the final games of a playoff series (e.g., Baumeister
106 & Steinhilber, 1984; Wright et al., 1995), it was hypothesized that away teams would win
107 significantly more overtime games than home teams in this type of outcome-imminent situation
108 (hypothesis 4). It does not appear that an examination of home and away teams' success in these
109 various types of playoff games has previously been conducted. As such, the results of this study
110 could provide a detailed test of Baumeister and Steinhilber's (1984) hypothesized home
111 disadvantage, and a novel contribution to the home (dis)advantage in sport literature.

112 **Methods**

113 Data were obtained from the NHL's official website (nhl.com), which provides the results
114 of all Stanley Cup playoff games in the league's history (1917 – 2018). All playoff series
115 followed a 'best-of' format, wherein teams play each other in multiple games. There was a
116 lockout during the 2004-05 season which resulted in the cancellation of the playoffs for that year.
117 As a result, data from the current study represent 100 years of overtime playoff games. Currently
118 (since the 1987 playoffs), 16 teams qualify for the playoffs each season and all series are decided
119 in a best-of-seven format (i.e., 15 total series). Hence, teams have an imminent opportunity to win
120 a series if they have a 3-0, 3-1, or 3-2 lead in games four, five, or six (respectively) of that series.

121 If the series is tied 3-3, both teams face a win-imminent opportunity in the decisive, “winner-
122 take-all” seventh game of the series. Series winners continue to advance through to the fourth and
123 final round of the playoffs, where the winning team are crowned the Stanley Cup champions.
124 This best-of-seven format was also followed for all playoff series from 1943 to 1974. Between
125 1975 and 1987, the first round of the playoffs was decided through a best-of-five series (with the
126 remaining rounds retaining the best-of-seven format). Prior to 1943, the playoffs went through
127 several iterations (as teams were added to the league or dissolved) and included various
128 combinations of best-of-three, best-of-five, and best-of-seven series formats.

129 **Data Analysis**

130 In the home (dis)advantage literature, differences in win-loss records between home and
131 away teams are often compared using chi-square (χ^2) for contingency tables (e.g., Baumeister &
132 Steinhilber, 1984; Jones, 2014). This data analytic approach was retained in the current study by
133 constructing four separate 2 x 2 (winner x game type) contingency tables within SPSS software
134 (Version 24; IBM SPSS Predictive Analytics, Chicago, IL). Thus, each overtime game was coded
135 by noting the location of the winning team (home or away) and game type. For the purposes of
136 this study, an *outcome-imminent* type of game was defined as a game where one or both of the
137 teams have an opportunity to clinch the series. In the current best-of-seven playoff format, this
138 occurs when one or both of the teams has obtained three of the necessary four wins in a seven-
139 game series (i.e., when the series is 3-0, 3-1, 3-2, or 3-3). Outcome-imminent games were further
140 broken down into three types of games: (1) *win-imminent-away*, where the away team could
141 clinch the series if they score in overtime; (2) *win-imminent-home*, where the home team could
142 clinch the series if they score in overtime; or (3) *final game*, where the home or away teams could
143 clinch the series if either scores in overtime (e.g., the seventh game of a best-of-seven series, fifth
144 game of a best-of-five series, or third game of a best-of-three series). All other overtime games,

145 wherein the result of the game could not immediately determine the series' winner, were labelled
146 as *non-imminent* games (i.e., when the series was 0-0, 1-0, 1-1, 2-0, 2-1, or 2-2 in the best-of-
147 seven format, 0-0, 1-0, 1-1 in the best-of-five format, or 0-0 in the best-of-three format). To test
148 the study hypotheses, the number of home and away team wins were compared for each of the
149 four types of outcome-imminent games. In each 2 x 2 table, the number of home and away team
150 wins in non-imminent were used as the baseline comparison (cf. Baumeister & Steinhilber, 1984;
151 Jones, 2014). Hence, the results of the chi-square tests reveal the differences between home and
152 away team win percentages in an outcome-imminent overtime playoff games relative to their
153 percentages in non-outcome-imminent overtime playoff games.

154 Results

155 Home and away teams' win percentages for each game type are provided in Table 1. The
156 win percentages of home and away teams in 591 non-imminent games (used as a baseline
157 comparison for each hypothesis) were 53.3% and 46.7%, respectively. In support of hypothesis 1,
158 there were no significant differences in winning percentages between home (46.5%) and away
159 (53.5%) teams in the 256 outcome-imminent overtime playoff games overall ($\chi^2 (df) = 3.32 (1), p$
160 $= .068$), relative to their winning percentages in non-imminent games; although it should be noted
161 that this p -value approaches conventional levels of statistical significance ($p < .05$) in favour of
162 an away team advantage. In support of hypothesis 2, away teams won significantly more games
163 (58.5%) than home teams (41.5%) in the 123 overtime games wherein the away teams had an
164 imminent opportunity to win the series ($\chi^2 (df) = 5.71 (1), p = .017$), relative to the teams' win
165 percentages in non-imminent games. No such advantage was found for home teams in the 82
166 games whereby they had an imminent opportunity to win the series. Specifically, in support of
167 hypothesis 3, the win percentages for home (52.4%) and away (47.6%) teams in these types of
168 overtime games did not differ significantly ($\chi^2 (df) = 0.02 (1), p = .888$), relative to the win

169 percentages that were noted in non-imminent games. Contrary to the expectation corresponding
170 to hypothesis 4, there were no significant differences in win percentages between home (49%)
171 and away (51%) teams in the 51 final games of a series that went to overtime, wherein both teams
172 had an imminent opportunity to win the series ($\chi^2(df) = 0.35(1), p = .329$), relative to win
173 percentages in non-imminent games.¹

174 **Discussion**

175 The purpose of this archival study was to examine a potential home (dis)advantage in
176 various types of NHL playoff overtime games over the league's 100-year history (1917 – 2018).
177 Previous studies (e.g., Baumeister & Steinhilber, 1984; Jones, 2014; Wright et al., 1995) have
178 examined team success rates in certain games of a series, such as by comparing home and away
179 team win percentages in the early games of a seven-game series (e.g., games 1-4) as well as in the
180 later games of a series (e.g., games 5-7). However, these analyses did not examine team
181 performance in specific types of games (e.g., in win-imminent games for the home team, away
182 team, or both teams) nor did they consider the imminence that is presented in overtime games
183 specifically—rather, those studies compared win percentages in playoff games regardless of
184 whether the game went to overtime or not. Other studies (e.g., Hoffman et al., 2017) have
185 compared home and away team success in overtime games; however, those analyses focused on
186 regular-season games, rather than playoff games. As such, the current study provides a potentially
187 notable addition to the home (dis)advantage literature as well as a novel means of testing
188 Baumeister and Steinhilber's (1984) "home choke" hypothesis. Three of the four hypotheses
189 tested in this study were supported. The results corresponding to each of these hypotheses, along

¹ It should be noted that the win percentages were very similar when the final game of three-, five-, and seven-game series were examined. In other words, the presented results do not vary when the final games in these three series lengths are examined together or separately.

190 with the implications and potential future research associated with each result are provided
191 below.

192 It was first hypothesized that there would be no overall differences between home and away
193 teams' winning percentages in overtime games when at least one of the teams had an opportunity
194 to win a playoff series (with the teams' win percentages in non-imminent overtime games serving
195 as the baseline comparison). This hypothesis was supported, which aligns with the results from
196 previous studies that have found null effects in home and away team success in outcome-
197 imminent situations (such as in shootouts in NHL regular season games; McEwan et al., 2012). It
198 should be noted, however, that the difference ($p = .068$) approached conventional levels of
199 statistical significance (i.e., $p < .05$) in favour of the away team winning significantly more
200 outcome-imminent games than home teams (53.5% versus 46.5%, respectively). Hence, it could
201 be *tentatively* concluded that there is no home (dis)advantage overall in overtime playoff games
202 when one or both of the teams has an opportunity to win a series. That said, future research on the
203 differences in home and away team success in playoff overtime games should be conducted with
204 other sports leagues to determine whether this null effect is apparent in those sports as well, or if
205 those differences reach conventional levels of statistical significance.

206 Second, it was predicted that away teams would win significantly more overtime games
207 than home teams when the away team had an imminent opportunity to win a series. This
208 hypothesis was indeed supported with away teams winning 58.5% of these games. Conversely,
209 no such advantage was anticipated for home teams in overtime games wherein the home team had
210 an opportunity to win a series. This hypothesis was also supported with home teams winning
211 52.4% of these games, which was quite similar to their winning percentage in non-outcome
212 imminent games (53.3%). These results appear to align with, and extend, findings from previous
213 studies, such as those from Wright et al. (1995) who found an away advantage in the game that

214 concluded a NHL playoff series (whether game 4, 5, 6, or 7). The current results add to those
215 findings by breaking these games into either a win-imminent opportunity for the home team or a
216 win-imminent opportunity for the away team. Moreover, demonstrating that there is an away
217 advantage (i.e., home disadvantage) in overtime games specifically is important, as these games
218 arguably provide a more specific test of Baumeister and Steinhilber's (1984) hypothesis, due to
219 the imminence embedded within sudden-death overtimes. Thus, while many studies have
220 examined performance in various types of championship and non-championship games (e.g.,
221 Baumeister & Steinhilber, 1984; Jamieson, 2010; Jones, 2014; Wright et al., 1995), additional
222 studies examining performance in various types of games when overtime is required could
223 provide a further (and perhaps more detailed) test of the home (dis)advantage and supplement the
224 results from previous studies.

225 Finally, it was hypothesized that away teams would win significantly more overtime games
226 than home teams in the final, decisive game of a series wherein *both* teams have an opportunity to
227 win the series—that is, in game 7 of a seven-game series (or, in earlier seasons of the NHL's
228 history, game 5 of a five-game series or game 3 of a three-game series). This hypothesis was not
229 supported, as there were no significant differences between home and away teams in these
230 games.¹ This is an interesting (null) finding when compared to previous studies that have
231 examined the home (dis)advantage in game sevens. For example, as previously mentioned,
232 Baumeister and Steinhilber (1984) found that away teams won 16 of the 26 (62%) MLB World
233 Series games that required a seventh game to decide the series between 1924 and 1982. By
234 contrast, in an updated analysis of these games, Jones (2014) found that home teams won all eight
235 World Series game sevens from 1983-2012. Further, Jones (2014) found that home teams won 15
236 out of 17 game sevens (88%) in National Basketball Association (NBA) championship and semi-

237 finals series from 1983-2012. Yet, neither a home nor away advantage was found in the current
238 study.

239 There may be two potential reasons in particular for these contrasting results. For one, it
240 should be reiterated that the results from both Baumeister and Steinhilber (1984) as well as Jones
241 (2014) were based on home and away team win percentages in game sevens regardless of
242 whether or not that game required overtime. As such, the “*imminent* opportunity to claim a
243 desired [winner’s] identity” (Baumeister & Steinhilber, 1984, p. 85, emphasis added) may not be
244 as prominent in those other leagues compared to the NHL. Second, these results may be due to
245 the differences in the playoff formats of NHL games compared to NBA and MLB games.
246 Specifically, overtime games in NHL playoffs are decided in a ‘sudden death’ format, wherein
247 the team that scores the first goal in overtime wins the game. As such, there is an additional
248 amount of imminence in NHL overtime games compared to NBA overtime games (which consist
249 of 5 minutes of overtime) and MLB games that require extra innings (whereby the home team
250 still has an opportunity to tie or win the game in the ‘bottom’ of the inning even if the away team
251 scores a run in the ‘top’ of the inning). Hence, a unique situation is presented when the decisive
252 game of a playoff series goes to sudden-death overtime (such as in NHL games), as *both* teams
253 have an imminent opportunity to win the series by being the first team to score a goal (as opposed
254 to the other types of outcome-imminent games where just one team has an opportunity to win the
255 series). Based on the (null) results from the current study, it would appear that neither a home
256 advantage nor disadvantage exists in these types of overtime games. Further research on the home
257 (dis)advantage in other sports that follow a ‘best-of’ playoff format along with a ‘sudden-death’
258 overtime format appears warranted to examine the generalizability of these findings.

259 Although the results of this study provide a novel and potentially substantive contribution
260 to the home (dis)advantage literature, it is not without certain limitations. For one, the hypothesis

261 by Baumeister and Steinhilber (1984) proposes that a home disadvantage is due to supportive
262 audiences enhancing home athletes' perceived pressure and inducing self-attention, which could
263 interfere with the execution of skillful responses. While this explanation is certainly possible, one
264 would be unable to conclusively determine that this was the mechanism of the results in the
265 current study, since no mediation analyses were able to be conducted (due to the archival nature
266 of the study). In addition, although the aforementioned sudden-death overtime format of NHL
267 playoff games enhances the imminence of these games and the 'best-of' playoff format allows for
268 comparisons of team success based on the various types of games, it does potentially limit the
269 generalizability of these findings due to the somewhat unique format of NHL playoff overtime
270 games compared to other sports. Moreover, the 2 x 2 contingency tables were specifically chosen
271 in order to test the hypotheses of this study, in a manner that was similar to past examinations of
272 the home (dis)advantage (e.g., Baumeister & Steinhilber, 1984; Jones, 2014). Of course, it is
273 important to recognize that this type of analysis precludes one from considering other factors that
274 might be involved in team success, such as distance travelled by away teams (cf. Carron et al.,
275 2005; Courneya & Carron, 1992) or team quality (cf. Hoffman et al., 2017).

276 **Conclusion**

277 The results of the current study provide further nuance to our understanding of the home
278 (dis)advantage in sport. Overall, the findings appear to support the notion that away teams might
279 have an advantage over home teams when there is an imminent opportunity to claim a winner's
280 identity. Future research examining the home (dis)advantage in specific types of games (and
281 situations within those games) in other sports as well as the mechanisms that might explain the
282 differences in success between home and away teams will help advance the literature on this area
283 of study beyond its current state.

- 284 **References**
- 285 Allen, M. S., & Jones, M. V. (2014). The "home advantage" in athletic competitions. *Current*
286 *Directions in Psychological Science*, 23, 48-53. doi: 10.1177/0963721413513267
- 287 Baumeister, R. F., & Steinhilber, D. (1984). Paradoxical effects of supportive audiences on
288 performance under pressure: The home field disadvantage in sports championships.
289 *Journal of Personality and Social Psychology*, 47, 85-93. doi:10.1037/0022-3514.47.1.85
- 290 Beilock, S. L., & Carr, T. H. (2001). On the fragility of skilled performance: What governs
291 choking under pressure. *Journal of Experimental Psychology*, 130, 701-725.
- 292 Beilock, S. L., & Gray, R. (2007). Why do athletes choke under pressure? In G. Tenenbaum, &
293 R. C. Eklund (Eds.), *Handbook of sport psychology (3rd ed.)* (pp. 425-444). Hoboken, NJ:
294 John Wiley & Sons.
- 295 Butler, J. L., & Baumeister, R. F. (1998). The trouble with friendly faces: Skilled performance
296 with a supportive audience. *Journal of Personality and Social Psychology*, 75, 1213-1230.
297 doi: 10.1037/0022-3514.75.5.1213.
- 298 Carré, J. M., Muir, C., Belanger, J., & Putnam, S. K. (2006). Pre-competition hormonal and
299 psychological levels of elite hockey players: Relationship to the "home advantage."
300 *Physiology and Behavior*, 89, 392-398. doi: 10.1016/j.physbeh.2006.07.011
- 301 Carron, A. V., Loughhead, T. M., & Bray, S. R. (2005). The home advantage in sport
302 competitions: Courneya and Carron's (1992) conceptual framework a decade later.
303 *Journal of Sports Sciences*, 23, 395-407. doi: 10.1080/02640410400021542
- 304 Courneya, K. S., & Carron, A. V. (1992). The home-field advantage in sport competitions: A
305 literature review. *Journal of Sport and Exercise Psychology*, 14, 28-39.
- 306 Hoffmann, M. D., Loughhead, T. M., Dixon, J. C., & Crozier, A. J. (2017). Examining the home
307 advantage in the National Hockey League: Comparisons among regulation, overtime, and

- 308 the shootout. *Psychology of Sport and Exercise*, 28, 24-30. doi:
309 10.1016/j.psychsport.2016.09.007
- 310 Jamieson, J. P. (2010). The home field advantage in athletics: A meta-analysis. *Journal of*
311 *Applied Social Psychology*, 40, 1819-1848.
- 312 Jones, M. B. (2014). The home disadvantage in championship competitions: Team sports.
313 *Psychology of Sport and Exercise*, 15, 392-398. doi: 10.1016/j.psychsport.2014.04.002
- 314 Law, J., Masters, R. M., Bray, S., Eves, F. F., & Bardswell, I. (2003). Motor performance as a
315 function of audience affability and metaknowledge. *Journal of Sport and Exercise*
316 *Psychology*, 25, 484-500.
- 317 Neave, N., & Wolfson, S. (2003). Testosterone, territoriality, and the “home advantage.”
318 *Physiology and Behavior*, 78, 269–275. doi: 10.1016/S0031-9384(02)00969-1
- 319 Nevill, A. M., & Holder, R. L. (1999). Home advantage in sport: An overview of studies on the
320 advantage of playing at home. *Sports Medicine*, 28, 221-236.
- 321 McEwan, D., Martin Ginis, K. A., & Bray, S. R. (2012). “With the game on his stick”: The home
322 (dis)advantage in National Hockey League shootouts. *Psychology of Sport and*
323 *Exercise*, 13, 578-581. doi: 10.1016/j.psychsport.2012.03.007
- 324 Staufenbiel, K., Lobinger, B., & Strauss, B. (2015). Home advantage in soccer – A matter of
325 expectations, goal setting and tactical decisions of coaches?. *Journal of Sports Sciences*,
326 33, 1932-1941. doi: 10.1080/02640414.2015.1018929
- 327 Unkelbach, C., & Memmert, D. (2010). Crowd noise as a cue in referee decisions contributes to
328 the home advantage. *Journal of Sport and Exercise Psychology*, 32, 483-498.
- 329 Wright, E. F., Voyer, D, Wright, R. D., & Roney, C. (1995). Supporting audiences and
330 performance under pressure: The home-ice disadvantage in hockey championships.
331 *Journal of Sport Behavior*, 18, 21.

Table 1

Home and away team success rates in National Hockey League playoff overtime games (1917-2018).

Game Type	Home Team Wins	Away Team Wins
All OT games (n = 847)	434 (51.2%)	413 (48.8%)
Non-Imminent (n = 591)	315 (53.3%)	276 (46.7%)
Outcome-Imminent (n = 256)	119 (46.5%)	137 (53.5%)
WI-Away Team (n = 123)	51 (41.5%)	72 (58.5%)
WI-Home Team (n = 82)	43 (52.4%)	39 (47.6%)
Final Game (n = 51)	25 (49%)	26 (51%)

Note. OT: overtime; WI-Away Team: visiting team can win the playoff series with a win in current game; WI-Home Team: home team can win the playoff series with a win in current game. Results do not include data from the 2004-05 season, as the playoffs were cancelled due to a league lockout.

Highlights

- Examination of team success in professional hockey (NHL) playoff overtime games
- There was an away team advantage when they had a chance to win a playoff series
- No home team advantage was found when they had a chance to win a series
- Home and away teams were equally likely to win final games that went to overtime