

Championship Pressures: Choking or Triumphant in One's Own Territory?

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R. F. Baumeister and A. Steinhilber's (1984) provocative, widely accepted analysis proposed that professional sports teams play unusually badly (choke) under the pressure created by their home fans and perform poorly in decisive home games of championship series. However, a reanalysis of the data, including the results of recent championships in baseball and basketball, finds no evidence of a home-field championship choke. The home field is an advantage, and the home team wins about as often late as early in championship series. Teams show an ability to triumph over pressure in asymmetrical "must-win" situations late in championship series. When choking occurs, it is associated with the anticipation of an important failure, not the distractions of possible success as suggested by Baumeister and Steinhilber.

Home territory provides a significant advantage to individuals who are contending with rivals. In the animal kingdom, animals are dominant in their own territories and submissive in the territories of others, and the result of combat is markedly tilted in favor of animals who fight on their own territories (Ardrey, 1966; Lea, 1984). In humans, too, individuals (Brown, 1987) and groups (Forsyth, 1990) maintain and defend territories. When in their own territories, people are more dominant and experience less stress (Brown, 1987; Forsyth, 1990). Debaters and negotiators, for example, have a distinct advantage when working in their own territories, winning more often and striking better deals than when they are in the territories of their opponents (Martindale, 1971; Rubin & Brown, 1975).

The advantages of home territory extend to the sports world. The notion that teams win more often on their home fields than on their opponents' fields is axiomatic in sports. In several studies, covering amateur and professional baseball, football, basketball, and ice hockey, home teams have been found to win more often than visiting teams, usually anywhere from 53% to 64% of the time (Courneya & Carron, 1992; Cox, 1985; Edwards, 1979; Schwartz & Barsky, 1977; Silva & Andrew, 1987; Varca, 1980). The outcomes of baseball games are illustrative and germane to the study we report in this article. Over the 10-year period from 1983 to 1992, 21,034 official regular season games were played by major league baseball teams, and 11,424 of these, or 54%, were won by home teams.¹ This percentage is precisely the historical average for the home-field advantage in major league baseball, indicating an impressive continuity over time and changing game conditions. From 1900 to 1982, home teams won 54% of the time (62,205 wins vs. 52,426 losses; Thorn & Palmer, 1984, p. 83). Not surprisingly, home teams

have a significant offensive advantage, scoring more runs (11% more) than the visiting teams (4.54 vs. 4.09 runs per game, based on statistics from 1976 to 1987, Wright & House, 1989, p. 132; see also Schwartz & Barsky, 1977). In the discussion that follows, we emphasize examples from baseball in order to maintain a consistent focus, but it should be recognized that most of the arguments about a home-field advantage can be generalized to other sports. In fact, focusing on baseball understates the case because the home-field advantage is smaller in baseball than in other team sports such as basketball and football (Edwards, 1979).

Why would a home-field advantage exist? A variety of reasons have been cited by sports psychologists, sports writers, and baseball statisticians. These reasons include the following. (a) Regime regularity: Players from the home team can capitalize on a more regular home life and game preparation schedule. They are able to live in their own residences rather than in strange hotels; can sleep more regular hours without the problems of travel inconvenience and jet lag; and have friends, family, and facilities available for support. These factors permit the home players to be better prepared for the game, giving them the edge in physical conditioning, mental conditioning, nutritional conditioning, and mechanical conditioning (Wright and House, 1989, p. 144). (b) Crowd support: Players from the home team play before more appreciative, supportive fans, whereas the visitors must perform without positive fan reinforcement and contend with hostility. Researchers have suggested that the home crowd therefore can differentially encourage and distract the home and visiting teams, increase the home team's dedication to win, and enhance the home team's functional, facilitating aggressiveness (Cox, 1985; Edwards, 1979; Varca, 1980). (c) Field familiarity: Players from the home team benefit from the physical conditions of the park or field because they are more familiar with them (e.g., the home-team baseball player

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¹ These data were taken from the *Macmillan Baseball Encyclopedia* (Reichler, 1985) and *The Elias Baseball Analyst* (Siwoff, Hirdt, Hirdt, & Hirdt, 1985-1993).

better knows the ways the ball will bounce in the infield and carom off the outfield walls). (d) Player-park matching: The peculiarities of the players and the park are often matched. The park is often tailored to capitalize on the skills of the home team (e.g., a team with a slow third baseman might keep the infield grass high in front of third base to reduce the speed of ground balls), and the unique features of the park prompt the team to acquire the types of players who can capitalize on those features (e.g., the New York Yankees usually try to acquire left-handed power hitters who can exploit the short home run distance to right field). (e) Officiating bias: Umpires react, presumably subconsciously, to the exhortations of the home crowd and give the home team the edge on close calls (Wright & House, 1989). (f) Strategic advantages: The home team has the strategic advantage of batting last in the game, so it knows precisely how many runs it needs to score in order to win and can make decisions accordingly. This is the only explanation in the list that cannot be generalized, at least to some degree, to other sports because the duration of other sports contests is fixed by a specific amount of time, not by alternating offensive opportunities defined by innings. The extent to which each of these factors contributes to the home-field advantage is still a matter of debate (Courneya & Carron, 1992; Wright & House, 1989).² Yet, these seem to be the primary reasons why playing at home is so highly valued in the sports world.

In light of what seems to be conclusive evidence for a home-field advantage, Baumeister and Steinhilber (1984) proposed a provocative, counterintuitive, and insightful idea: The home field can be a disadvantage for teams who are on the verge of a major victory. Baumeister and Steinhilber argued that players on the brink of a championship will play unusually badly, or "choke," under the pressures generated by a supportive home crowd. They hypothesized that,

In a decisive contest, the home team and fans focus on winning the championship if success seems within their grasp. The impending redefinition of self (as champions), particularly in front of the home crowd, engenders self-attention, which causes performance decrements. (p. 86)

To test their ideas, Baumeister and Steinhilber examined archival data from baseball World Series from 1924 to 1982. They found that the home team choked when on the verge of victory; for instance, in the decisive seventh game of the series, the home team won only 39% of the time, and the home players made many more errors than the visitors! Data from basketball championships, although flawed in several ways (see below), were generally consistent with the data from baseball.

Baumeister and Steinhilber (1984) seemed to have uncovered a fascinating exception to the rule: The home team has a pronounced advantage except when on the verge of a championship, at which time it is majorly disadvantaged. In addition to qualifying a well-established principle, this exception offered insights into psychological aspects of competition and goal achievement. Not surprisingly, the conclusions attracted considerable attention and produced an instant impact. The home-field championship choke is now taken for granted in the literature. Baumeister and Steinhilber's conclusions appear in nearly all social psychology textbooks (e.g., Brehm & Kassir, 1993; Myers, 1993; Sabini, 1992; Worchel, Cooper, & Goethals,

1991), group dynamics texts (e.g., Forsyth, 1990), sports psychology texts (e.g., LeUnes & Nation, 1989), many personal adjustment texts (e.g., Weiten, Lloyd, & Lashley, 1991), and general psychology textbooks (e.g., Bernstein, Roy, Srull, & Wickens, 1988; Roediger, Capaldi, Paris, & Polivy, 1991). No discussion of performance under pressure or choking is complete without reference to the paradoxical home-field disadvantage in professional sports. Subsequent studies, using the same database used by Baumeister and Steinhilber, have tried to fine-tune the causes of the disadvantage (Benjafield, Liddell, & Benjafield, 1989; Heaton & Sigall, 1989). However, these follow-ups have never questioned the existence of the home-field championship choke itself.

We became interested in the topic for several reasons. First, as sports fans, we could not help but notice that the 1980s and 1990s have not been kind to the concept of the home choke in decisive championship games. In baseball since 1982, four World Series went to a seventh game, and every one of these was won by the home team; in basketball since 1982, the six final and semifinal championships that went to seven games were all won by home teams. This raises questions about the reliability of the home choke, especially in light of the relatively small amount of data involved in the original sample (e.g., only 26 World Series seventh games occurred from 1924 to 1982; Baumeister & Steinhilber, 1984). Would the home-field disadvantage still be found if the analyses were to include the World Series results of the last decade? Would it be found if the database was expanded to include the results of the league championships (which Baumeister and Steinhilber included in their analyses of basketball but did not include for their analyses of baseball because the championships were only best-of-five game series until 1985)?

Second, the home-field championship choke has not been found in other sports, such as professional ice hockey (Gayton, Matthews, & Nickless, 1987). This could indicate an unreliable effect or a lack of generalizability; in either case, the effect is worth reexamining in the light of the new data from the last 11 years.

Third, even without the first two causes for concern, any effect that runs contrary to an established body of evidence is worth another look before it is granted the status of a bona fide exception to the rule. The idea that teams are benefited by playing at home has been one of the most reliable and pervasively documented findings in all team sports.

Finally, we had questions about the dynamics of choking. When people choke, they perform more poorly than they other-

² Wright and House (1989, p. 139) guesstimated, on the basis of their experiences as a statistician for a major league baseball team (Wright) and major league player and coach (House), that about 5% of the home-field advantage is due to the psychological lift provided by the crowd, about 5% is due to the strategic advantage of batting last, about 10% is due to the familiarity with the ballpark, about 10% is due to matching the players and park, about 30% is due to regime regularity, and the largest share, about 40%, is due to the umpires' bias toward the home team. These percentages probably will not be the final word on apportioning responsibility for the home field advantage. Yet, the analysis is of interest because it illuminates some of the major determinants of the home-field advantage and represents the conclusions of knowledgeable baseball insiders.

wise would because of pressures arising from the importance of the performance. In everyday usage, choking evokes images of self-consciousness, nervousness, anxiety, distraction, and pushing to perform beyond one's limits. Yet, the concept of choking described by Baumeister and Steinhilber (1984) is a kinder, more benevolent one driven by visions of success, not fears of failure. They reasoned that when players and devoted home fans are on the threshold of winning a championship, the impending redefinition of selves as champions produces self-attention. Because this self-attention is pleasant, it is maintained, causing players to become distracted from the task at hand and to become overly conscious of what would otherwise be automatic-response sequences, thereby disrupting them (akin to the skilled pianist attending to every finger movement and therefore playing poorly). This premature mental victory celebration, with its attendant self-attention, causes the home players to perform poorly and gives the visiting team the edge it needs to win. In contrast, when players are on the verge of defeat before the home crowd, they want to terminate self-attention because it is unpleasant. Because they are less self-attentive, home players who face defeat are better able to concentrate on the task and perform better. Thus, the home crowd enhances performance pressure, which generates performance-impairing self-attention when the team is on the verge of victory. Furthermore, home players will perform better when on the verge of defeat than victory.

Although we acknowledge that people prefer to terminate self-attention when they anticipate an important public failure, it is not easy to do so, especially when the failure is still in progress during the game. In fact, the data from controlled laboratory studies indicate that failure or the anticipation of failure is associated with more prolonged and disruptive periods of self-attention than is success (Carver, 1979; Langer & Imber, 1979; Schlenker & Leary, 1982). Furthermore, social anxiety and debilitated performance is produced by the combination of an important performance and expectations of failure, whereas expectations of success are usually associated with improved performance (Schlenker & Leary, 1982; Schlenker, Weigold, & Doherty, 1991). In laboratory research, Baumeister, Hamilton, & Tice (1985) found that participants perform poorly when public expectations far exceed their own private expectations about how well they will perform, whereas participants perform well if they believe they can perform up to public expectations. The "darker" form of choking, produced by fears of an important public failure, contrasts with the kinder form of choking described by Baumeister and Steinhilber (1984). In the larger context of rechecking the existence and nature of the home choke, we also decided to reexamine players' performances during decisive championship games to see if they committed errors when on the verge of victory (when their team was ahead in the game) or defeat (when their team was behind in the game). Baumeister and Steinhilber's analysis indicated that errors are made when the home team is ahead during a decisive game, whereas we hypothesized that errors are made when the home team is behind.

Investigation 1: Baseball

Method

Baseball championships are the ideal source of archival sports data about the home-field advantage. First, the structure of baseball champi-

onships produces a natural experiment. The location of the games in both the league championships and the World Series is scheduled without reference to the records of the two teams, with the site of the first game alternated yearly between the representatives of the two divisions or leagues. In other professional sports, the team with the better winning record during the season is given the home-field advantage during the championships, thus confounding the quality of the team and the home-field advantage. Second, baseball provides an ideal data set because more detailed records are available than from other sports. This is not only due to public interest in the game's records but also because of the nature of the game itself: Each act is relatively discrete and easy to record. This contrasts with other team sports in which fans are lucky to track even a small part of the action on any play (e.g., 22 football players simultaneously moving amid what might seem to be chaotic conditions).

Following Baumeister and Steinhilber (1984), we began our analysis with the 1924 World Series. The modern best-of-seven games format was instituted in 1924, with Games 1, 2, 6, and 7 played at the home field of one team and Games 3, 4, and 5 played at the home field of the other team. Baumeister and Steinhilber excluded all four-game sweeps from their data set, arguing that there is little room for choking on occasions when one team is drastically superior to another. We followed suit and excluded four-game sweeps. (There were 12 sweeps in the World Series from 1924 to 1993, with the home team in Game 1 winning 7, and two sweeps in the league championships from 1985 to 1993, with the visiting team in Game 1 winning both.)

Unlike Baumeister and Steinhilber (1984), we also excluded the data from the World War II years of 1943–1945. Baseball purists might argue that these years should be ignored because most major league players were in the service, and the "big leagues" were populated with the old and infirm. Our reasons were different: Wartime travel restrictions, imposed in 1943 and kept in place through 1945, altered the home–visitor pattern that has been in place for all other years from 1924 to the present. In 1943 and 1945, the American League team played the first three games at home and then played as many of the next four games as were necessary in the park of the National League team. This altered the psychological meaning of specific games (e.g., Game 5 was no longer the last chance at home for the team that was the visitor in Game 1). More important, it created problems for using Games 1 and 2 as a home performance baseline for evaluating the last game because these games were played at different parks with different teams designated home and visitor. Just as Baumeister and Steinhilber excluded the results of pre-1924 best-of-seven series because they involved a different pattern of home–visitor games, so should the 1943 and 1945 series be excluded. In 1944, two teams from St. Louis, the Browns and Cardinals, played in the World Series; both used the same home field and alternated the designation of home and visitor on a game-by-game basis, so this series is uninformative about the idea of a home choke. It should be noted that excluding the World War II years did not change the significance of any of our analyses or alter our conclusions.³

The data set thus consisted of World Series games played between 1924 and 1993, excluding the World War II years (1943–1945) and the four-game sweeps. We also tabulated the results of the baseball league championships from 1985 to 1993, which had best-of-seven game formats. The league championships were instituted after the American and National Leagues split into divisions in 1969. From 1969 to 1984, however, these series were best-of-five formats, and it is inappropriate to

³ In only one of these years, 1945, did the series go to seven games, and that seventh game was won by the visitor. However, this exclusion does not change the results. Although the home-team seventh-game win percentage drops slightly (from 48% to 47%), the game 1 and 2 home baseline used to assess this performance also drops (from 63% to 61%). Thus, there is little relative change in the comparison.

Table 1
Home-Field Performance (Wins-Losses) on a Game-by-Game Basis

Type of game	Games							Overall
	1	2	3	4	5	6	7	
World Series	35-20 64%	31-24 56%	35-20 64%	30-25 55%	28-27 51%	26-16 62%	14-15 48%	199-147 58%
League championships	10-6 63%	10-6 63%	11-5 69%	4-12 25%	9-7 56%	5-7 42%	4-2 67%	53-45 54%
Total	45-26 63%	41-30 58%	46-25 65%	34-37 48%	37-34 52%	31-23 57%	18-17 51%	252-192 57%

Note. Within each row, the wins and losses at home (e.g., 45-26 signifies 45 wins and 26 losses at home) are given on the top line, and the home-field winning percentage (e.g., 63%) is given immediately underneath.

combine this data with series based on a best-of-seven format. We keep the World Series and league championships separate in our presentations to ensure that any differences between them are detectable. It is worth noting that Baumeister and Steinhilber (1984) included the comparable league championships in their analysis of basketball data.

Results and Discussion

Table 1 summarizes home-field performance on a game-by-game basis. Overall, the home-field advantage was slightly but not significantly greater in championship games than it was during the regular season (57% vs. 54%).

Turning to the home-choke hypothesis, Table 2 shows the updated data in the form presented by Baumeister and Steinhilber (1984), comparing the home teams' performance in Games 1 and 2 versus the home teams' performance in the last game of

the series, with the seventh game also presented separately. As would be expected given the large differences reported by Baumeister and Steinhilber, there was still a slight tendency for teams to do worse at home in the last game of the World Series than in the first two games, but the effect no longer reached conventional levels of statistical significance, $\chi^2(1, N = 165) = 2.41, p < .15$. Furthermore, the comparison of the crucial seventh game of the World Series with the first two games fell well short of significance, $\chi^2(1, N = 139) = 1.29, p < .30$; in fact, as we explain shortly, a decrement was found only in five-game series. Furthermore, home teams have not choked in the league championships, performing as well in the seventh game (67%) as in Games 1 and 2 (63%). Overall, combining the World Series and league championships, home teams have won the seventh game slightly more often than not. In the best-of-five league championships from 1969 to 1984, the last game (Game 4 or 5, excluding three-game sweeps) was won by home teams 11 of 19 times, for a 58% winning record. Thus, home teams have been advantaged in decisive games of the league championships both before and after 1985.

Although the home choke in the World Series has disappeared statistically, might it be that the last decade has comprised an unlucky run of chance reversals (for the visitor and the home choke hypothesis)? After all, the comparison of the first two games of the World Series and the last game (5, 6, or 7) is in the right direction, so perhaps the effect will reestablish itself in the next decade. However, a closer examination of the data leads to the conclusion that the home choke does not exist and therefore will not return. We arrived at this conclusion from each of three separate yet converging paths, dealing with (a) the determination of performance baselines, (b) the absence of the effect across eras in baseball, and (c) the pattern of errors that are made in decisive contests.

Baseline problems. One reasonable baseline for determining whether the home team does better or worse in the decisive game of a championship series is how well that team performed in its initial home games. At first glance, it might appear that this is the baseline used by Baumeister and Steinhilber (1984), but on closer inspection it is not. There are two problems. First, when a series is decided in only five games, it is inappropriate to use the home winning percentage from the first two games as a baseline. The team that was the home team in the fifth game was not the home team in the first two

Table 2
Home Team Performance: Games 1 and 2 Versus Last Game (5, 6) Versus Game 7

Game	Wins	Losses	Home %	Baumeister & Steinhilber (%)
World Series (1924-1942, 1946-1993)				
Games 1 & 2	66	44	60	60
Last game	26	29	47	41
Game 7	14	15	48	39
League championships (1985-1993)				
Games 1 & 2	20	12	63	
Last game	8	8	50	
Game 7	4	2	67	
Total				
Games 1 & 2	86	56	61	
Last game	34	37	48	
Game 7	18	17	51	

Note. The last column in the World Series section shows the home winning percentages found by Baumeister and Steinhilber (1984) based on World Series results through 1982, including the World War II years of 1943-1945.

Table 3
*Home Team Performance in the World Series and
 League Championships by Length of Series
 (Five, Six, or Seven Games)*

Game	5-game series	6-game series	7-game series	6- and 7-game series combined
World Series				
Games 1 & 2	14-12 54%	18-8 69%	34-24 59%	52-32 62%
Games 3 & 4	11-15 42%	19-7 73%	35-23 60%	54-30 64%
Last game (5, 6, or 7)	5-8 39%	7-6 54%	14-15 48%	21-21 50%
League championships				
Games 1 & 2	6-2 75%	6-6 50%	8-4 67%	14-10 58%
Games 3 & 4	4-4 50%	4-8 33%	7-5 58%	11-13 46%
Last game (5, 6, or 7)	1-3 25%	3-3 50%	4-2 67%	7-5 58%
Total				
Games 1 & 2	20-14 59%	24-14 63%	42-28 60%	66-42 61%
Games 3 & 4	15-19 44%	23-15 61%	42-28 60%	65-43 60%
Last game (5, 6, or 7)	6-11 35%	10-9 53%	18-17 51%	28-26 52%

Note. Within each row, the wins and losses at home (e.g., 20-14 signifies 20 wins and 14 losses at home) are given on the top line and the home-field winning percentage (e.g., 59%) is given immediately underneath.

games; as compared with the first two games, the fifth game is played in a different park with opposite teams having the designation of home and visitor. An appropriate baseline for five-game series is the home team's winning percentage in Games 3 and 4, which are the first two home games in the park of the team that is the home team in Game 5. Second, when a series goes down to the wire, it is inappropriate to include in the baseline the performance of teams that disposed of their opponents more quickly. For example, series that go seven games may be more evenly matched, and the teams' initial winning records at home may differ from those of teams in series that do not go to seven games. Thus, it is appropriate to restrict the comparison of how a team did in Games 6 or 7 to how the same team performed in Games 1 and 2.

Table 3 presents the data with the appropriate baselines included. First, the lowest winning percentage by a home team in a decisive game of the World Series occurs in five-game series; the home team then won only 39% of the time. However, this is virtually identical to how the same team performed in its own park in Games 3 and 4 (42%, $p < .82$), which is an appropriate baseline for this comparison. The data from the league championships show the same pattern. Clearly, the home team's defeat in the fifth game is not a *decisive-game choke* in any sense of the term because the team is performing equally poorly in all home

games. Perhaps five-game series end disproportionately with the home team as the loser in the final game because it is easier to continue to lose after one's confidence has been sapped by earlier home losses; initial home losses may embolden the visitor and discourage the home team.

Second, when the World Series goes to seven games, the home team in the decisive last game wins slightly less than they did in the first two games (48% vs. 59%), but this difference is far from significant, $\chi^2(1, N = 87) = 0.84, p < .36$. By updating the World Series data, the 39% home winning record in Game 7 that was reported by Baumeister and Steinhilber (1984) rises to 48%. When the comparable data from the league championships are added, the difference between Game 7 and the first two games becomes even smaller (51% vs. 60%), $\chi^2(1, N = 105) = 0.70, p < .40$, and the home team wins more often than not. The same pattern holds in six-game series. The home team wins a bit less in the last game than the first two games (54% vs. 69%), but the comparison does not approach significance, $\chi^2(1, N = 39) = 0.89, p < .35$. The same is true when the comparable data from the league championships are added (53% vs. 63%, $p < .50$). Finally, combining the results of Games 6 and 7 still fails to reveal a significant comparison (first two vs. last game: World Series only, $p < .20$; combined data, $p < .26$).⁴

Thus, the home field is not a disadvantage in the decisive last game. If Baumeister and Steinhilber (1984) had conducted their analyses today, it would be difficult to argue that these are even convincing trends, particularly in light of the paradoxical quality of their hypotheses. The strongest conclusion one could draw about choking is that when a series is closely contested, the home field may not provide as much of an advantage as it does at other times during championship series, although even here the difference is far from statistically significant, and the home team is winning more often than not (it is not *disadvantaged* by losing at the 60% plus rate reported by Baumeister and Steinhilber). We now turn to a closer examination of the data, which results in the conclusion that the home field has provided a clear advantage in decisive games throughout most of baseball history.

Choking across eras. In tabulating the data, we noticed that decisive home losses came in bunches during baseball's history, especially in its "middle period." This piqued our interest, so we divided the data into three eras that make sense in baseball's timeline: (a) from 1924 through 1949, which was largely the pretelevision era of the World Series, (b) from 1950 through 1968, and (c) from 1969 to 1993. The 1950s and early 1960s are often called by baseball writers the "Golden Age" of the

⁴ It could be argued that limiting the baseline to performances by the same team in earlier home games is too restrictive. A baseline comprising a larger sample might be desirable. Several historical baselines are available that include large numbers of games, such as (a) the overall home winning percentage in all World Series games included in the study (58%), (b) the overall home winning percentage in all championship games included in the study (57%), or (c) the home winning percentage during the regular season for all major league games this century (54%). However, because these baselines are closer to a 50-50 split than almost all of the baselines used by Baumeister and Steinhilber (1984) and us, the results of Games 6 and 7 are even less of a departure from baseline.

Table 4
Home Team Performance in Six- and Seven-Game Series by Eras

Game	World Series			League championships
	1924-1949	1950-1968	1969-1993	1985-1993
Seven-game series				
Games 1 & 2	9-7 56%	15-7 68%	10-10 50%	8-4 67%
Game 7	6-2 75%	2-9 18%	6-4 60%	4-2 67%
Six-game series				
Games 1 & 2	5-3 63%	4-2 67%	9-3 75%	6-6 50%
Game 6	2-2 50%	2-1 67%	3-3 50%	3-3 50%
Both six- and seven-game series				
Games 1 & 2	14-10 58%	19-9 68%	19-13 59%	14-10 58%
Last game (6 or 7)	8-4 67%	4-10 29%	9-7 56%	7-5 58%

Note. Within each row, the wins and losses at home (e.g., 9-7 signifies 9 wins and 7 losses at home) are given on the top line and the home-field winning percentage (e.g., 56%) is given immediately underneath.

game; these were the fabled days of Willie Mays, Mickey Mantle, and Duke Snider, among other notables. The World Series also became widely televised during this era. The year 1969 served as another natural break point because it was the year the leagues split into divisions and added another layer of championships, the league championships. In 1994, baseball underwent realignment and changed the play-off system once again, so the 1969-1993 era represented another distinct, definitive, and finalized segment of baseball history.

Table 4 presents the data from the three eras. As can be seen, the home team performed very well in the seventh game in the first (1924-1949) and last (1969-1993) eras, as well as in the league championships. During these 51 seasons, the home team actually won slightly (but not significantly) more often in Game 7 (16-8, 67%) than Games 1 and 2 (27-21, 56%). Combining decisive sixth and seventh game performances in all championship games during these 51 years, the home team won 60% (24-16) of the decisive games, which is about the same as their winning percentage in early games (59%, 47-33).

The most unusual feature of Table 4 is the dismal performance of the home team in the seventh game of the World Series during the period from 1950 to 1968. Eleven series went to seven games during those 19 years, and 9 of them were won by the visitor; the comparison between first and last games is significant, $\chi^2(1, N = 33) = 7.34, p < .01$. It was only during this period that home teams appeared to be disadvantaged in the seventh game. Thus, the home choke pattern has not typified baseball postseason play; in fact, the reverse is true. For most of baseball history, the home team has had a pronounced advantage playing a decisive championship game at home, win-

ning two thirds of the time in crucial seventh games; the exceptions were the 11 series from the period from 1950 to 1968.

Why did the home team play so poorly in decisive games during those 11 World Series? One possibility is that there was something unique about that era that produced home choking, and that "something" was not present before or since. Perhaps it was the initial introduction of televised games, the expansion of baseball from coast to coast, the lack of free agency, or some combination of these and other reasons. Another possibility is that it merely represents a chance pattern, identical to flipping an inordinate number of tails in a row when tossing a coin. It is hard to envision a convincing argument that the 1950-1968 era had greater pressure or incentives than those that exist today, and there is clearly no hint of a home choke in the championships since 1969, with the home team winning 57% (16-12) of the decisive sixth and seventh games. It strikes us that the chance interpretation is parsimonious and reasonable. Fortunately, though, we do not have to rely on personal preference; we can turn to data on errors to help disentangle the possibilities. If the errors committed in decisive games follow the expected home-choke pattern during the 1950-1968 era, but not the other eras, it would support the idea that there was something unique about that time period that produced choking at home. If the errors do not follow the expected home-choke pattern, it would suggest merely a chance pattern of decisive home losses during that period.

Errors in decisive games. Baumeister and Steinhilber (1984) argued that fielding errors comprise "a relatively pure measure of choking" (p. 88) because errors are immune from the interdependence of most other acts during the game (e.g., a hit represents some combination of good batting and poor pitching). In their words, "the shortstop who is busy imagining himself celebrated as a World Series hero in a victory parade may misjudge the ball bouncing toward him and make a fielding error" (p. 86). They restricted their analysis to errors in the seventh game "to avoid confounds due to fielding in different ballparks" (p. 88) and found striking support for the choking hypothesis. The home team dramatically increased its error rate in the decisive seventh game as compared with its rate in Games 1 and 2 and to the visitor's rate in the seventh game, whereas the visitor's rate improved slightly, but not significantly, from Games 1 and 2 to Game 7.

Table 5 presents the updated error rate, overall and broken down into eras. Overall, the pattern found by Baumeister and Steinhilber (1984) is still significant for the World Series: The visiting team makes nearly the same number of errors in the seventh game as in Games 1 and 2, whereas the home team makes many more errors in the seventh game than does the visitor or than it did in Games 1 and 2, $\chi^2(1, N = 153 \text{ errors}) = 5.78, p < .02$. It appears that the home teams choked in the decisive games.

Looking at the data broken down by eras, though, gives a very different picture. Curiously, the 1924-1949 period was the only one that perfectly tracked the overall pattern, with the home team increasing its error rate above that of the visiting team and its own initial baseline. Yet, the home team won the seventh game 75% of the time during the 1924-1949 era, despite the inordinate numbers of errors.⁵ The 1950-1968 era hinted at the

⁵ Error rates were relatively high during the period from 1924 to 1949, due largely to smaller, less adequate fielding gloves and more

Table 5
Errors Per Game, by Era

Era	Visitor	Home
World Series		
1924-1949		
Games 1 & 2	1.13	0.75
Game 7	0.88	1.75
1950-1968		
Games 1 & 2	1.05	0.36
Game 7	0.91	1.09
1969-1993		
Games 1 & 2	0.85	0.90
Game 7	0.60	0.80
Overall		
Games 1 & 2	1.00	0.66
Game 7	0.79	1.17
League championships		
1985-1993		
Games 1 & 2	0.92	0.50
Game 7	1.33	0.33

pattern and was the only era in which losing and increasing one's error rate were associated, but the relationships did not show a good fit to the hypothesized pattern. Although the home team was making more errors in Game 7 than Games 1 and 2, it was not making more errors than the visiting team. The aberrant number for the 1950-1968 era (see Table 5) appeared to be the unusually low error rate by the home team in the first two games (0.36 errors per game); this was only about 30% to 40% of the error rate of the visitor (early or in decisive games) or of the home team in decisive games, and was less than half of the error rate made by these teams during the regular season (0.89 errors per game). Thus, in the context of the number of errors that were made during that time period, the home team had a relatively low error rate in the first two games and did not have an elevated error rate in the seventh game; in the absence of any compelling explanation for this deviation, it seems reasonable to interpret it as a chance variation. Looking at the data differ-

poorly maintained playing surfaces as compared with later eras (the per game error rates for each team were 1.13, 0.86, and 0.79 for the 1924-1949, 1950-1968, and 1969-1993 periods, respectively; see James, 1988, for an analysis of error rates across historical periods). The overall analysis of errors is thereby heavily influenced by the high error rate from the 1924-1949 period. An anonymous reviewer cogently observed that, on occasions when the home team does not perform well in decisive games, it may be due to championship cockiness, not choking. The data from the 1924-1949 period are consistent with such an observation, because the home team won 75% of the seventh games yet committed a large number of fielding errors. However, we are quick to point out that there is no convincing overall evidence for a championship cockiness effect either.

⁶ Neft and Cohen (1990) provided play-by-play accounts of the World Series. We were unable to obtain play-by-play accounts of the league championships, so we were unable to conduct the parallel analysis on that data.

ently, during the era when the home team won the seventh game 75% of the time (1924-1949), the home team had twice the error rate in the seventh game as did the visiting team (1.75 vs. 0.88 for the home and visitor, respectively). During the era when the home team won the seventh game only 18% of the time (1950-1968), the home team and the visiting team had nearly identical error rates in the seventh game (1.09 vs. 0.91 for the home and visitor). These relationships do not indicate that error rate in decisive games was tracking and indicating a home choke. Finally, the period from 1969 to 1993 did not display the home-choke error pattern, as the home team made non-significantly fewer errors in the last game than in earlier games ($p < .72$), and as we have already seen, the home team was not choking during this era, winning 60% of the decisive games.

In summary, the home-choke effect was suggested on the basis of data from final game won-loss records and error rates, yet the eras that showed the best evidence for each did not coincide. This leads us to conclude that such patterns are probably chance fluctuations. The error rates do not support the idea that home teams choke in decisive games.

Fielding errors can also be used to answer a different question about the nature of choking: At what times does the home team make errors in the decisive game? Baumeister and Steinhilber (1984) proposed that teams choke because they become self-attentive when on the threshold of victory. As such, errors should disproportionately occur in decisive games when the home team is ahead in the score; they should occur infrequently when the home team is behind in the score. To determine whether errors are made by home players who are fantasizing about victory or worried about defeat, we tabulated whether each error committed by the home team in the seventh game came when the team was ahead, tied, or behind in the score.⁶

Table 6 presents the time at which the errors were made, overall and divided by era. Of the 34 errors committed by the home team in the seventh game of the World Series since 1924, only 6 occurred when the home team was ahead, whereas three times as many, 18, occurred when the home team was behind; 10 occurred when the teams were tied. The difference in percentage of errors when ahead versus behind was significant, $z = 3.56$, $p < .001$. Even more striking is the fact that during the era when the home team was losing the decisive game, 1950-1968, 8 of 12 errors occurred when the home team was behind in the game, and none occurred when it was ahead. Thus, errors are disproportionately committed by the home team in decisive games after the team falls behind. The portent of failure in front of the home fans, and the attendant disappointment and perhaps shame, may then cause players to become self-conscious, become anxious, and press too hard, which translates into errors.

Pressure in the series: Must-win situations. Baumeister and Steinhilber (1984) noted that the incentive structure of Game 7 confounds the desire to achieve success and the desire to avoid failure, and they argued that only the former is associated with the home choke. To disentangle these motives, they examined home teams' performances in Game 6, which begins with one team on the verge of defeat (the team has won only two of the preceding five games) and one on the verge of victory (the team has won three games). They found that when the home team

Table 6
Game 7 Errors Committed by the Home Team
in the World Series

World Series	Home team score		
	Ahead	Tied	Behind
1924-1949	2	3	9
1950-1968	0	4	8
1969-1993	4	3	1
Overall	6	10	18

needed to win or be eliminated, it won nearly 73% of the time; but when it could clinch the championship with a win, it won only 38% of the time. They concluded that choking is caused by the pressures of impending victory, not defeat.

Table 7 shows the updated statistics on how the home team performed when facing the possibility of final defeat or final victory in Game 6. As can be seen, the effect was still strong today, with the home team in the World Series winning 76% of the time when it had to win or be eliminated but only 41% of the time when it could clinch the championship, $\chi^2(1, N = 42) = 5.20, p < .03$. When the home team must win the sixth game to stay alive, it wins more than three fourths of the time.

For Baumeister and Steinhilber (1984) this difference indicated that choking is produced by impending success, not the fear of failure. However, if the decisive-game home choke does not exist, what is producing this difference? To us, the difference reflects an impressive response to pressure. Before the start of a game in a closely contested series, the most pressure-packed situation of all is to confront a win-or-else, with no tomorrow, threat of elimination. The team that is ahead three games to two knows it only has to win one of the remaining two games; the team that is behind must take both upcoming games. The latter team cannot afford to lower its concentration or let up in any way; the former team can afford such luxuries. This gives the edge in Game 6 to the team who is behind. Looking at the data differently, we can ask: How do teams perform when they must win Game 6? In the present investigation, the home team won 76% of the time (19-6), and the visiting team won 59% of the time (10-7); in the latter case, the home team that could have clinched was 7-10, see the "can clinch" numbers in Table 7. Both were impressive responses to pressure, and although the home field contributed an advantage of 17%, the difference between home and visitor was not significant, $\chi^2(1, N = 42) = 1.40, p < .24$. Given the lack of any support for the idea that the home team is choking under pressure in decisive games, this difference looks more like a team meeting the challenge when it must win. It does not look like the collapse of a choking home team under fantasies of ultimate victory. In Game 7, of course, both teams need to win, but this source of pressure applies to both equally.

There is no evidence from baseball that home teams choke under the pressure of decisive championship contests and perform worse than they do in earlier games. We now turn to basketball championships to determine if the home choke holds there.

Investigation 2: Basketball

To enhance the generalizability of their baseball findings, Baumeister and Steinhilber (1984) examined the results of National Basketball Association (NBA) championship games from 1967 to 1982. To increase their sample size, they included in their analyses both final and semifinal championship games. The basketball data are useful in that (a) like baseball, the NBA plays a best-of-seven game series, and (b) records are kept of the number of free throws made and attempted in each game, which constitutes a measure of individual performance akin to fielding errors in baseball. However, unlike baseball, NBA championships contain key confounds. First, the home court for the first game is not alternated but always goes to the team with the better record during the regular season. Second, the team with the better regular-season record always has the possibility of playing four of seven games at home. Third, the NBA has periodically changed the specific games that are played on the home court of the team with the better record (e.g., most years the team with the better record has been at home in Games 1, 2, 5, and 7; but some years the team with the better record has played Games 1, 3, 5, and 7 at home, whereas other years they played Games 1, 4, 5, and 7 at home; since 1985 the team with the better record has played at home in Games 1, 2, 6, and 7 of all final series). To minimize the impact of these confounds, Baumeister and Steinhilber used the results of Games 1-4 as the home court performance baseline (instead of only Games 1-2, as in baseball). The baseline was thus consistent in each series, with an equal mix of home and visiting games for each team, and was not biased in favor of the team with the better or worse record. It did not, of course, allow a direct comparison of how a team did at its own home court earlier versus later in the series (see earlier comments about baseline problems in baseball). As with baseball, Baumeister and Steinhilber excluded the results of four-game sweeps.

Baumeister and Steinhilber (1984) found that home teams won significantly fewer final games than initial games (46% vs. 70%), and home teams were at a considerable disadvantage in

Table 7
Results of Game 6 in World Series and League Championships

Home team situation	Winner		Home %
	Home	Visitor	
World Series			
Must win	19	6	76
Can clinch	7	10	41
League championships			
Must win	2	3	40
Can clinch	3	4	43
World Series and league championships			
Must win	21	9	70
Can clinch	10	14	42

Note. Must win = home team was behind three games to two; Can clinch = home team was ahead three games to two.

Table 8
National Basketball Association Final and
Semifinal Results (1967–1993)

Game	Winners		Home %
	Home	Visitor	
All series			
Games 1–4	184	88	68
Last game	35	33	52
Five-game series			
Games 1–4	48	32	60
Game 5	12	8	60
Six-game series			
Games 1–4	81	35	70
Game 6	12	17	41
Seven-game series			
Games 1–4	55	21	72
Game 7	11	8	58

Game 7, winning only 39% of the time. Furthermore, the home team sank a smaller percentage of free throws in the last game than in the first four games, whereas the visitor sank about the same percentage at both times. These findings again suggest that the home team chokes in decisive contests.

Method

We repeated Baumeister and Steinhilber's (1984) selection of archival data with the addition of the results of the last 11 years. We included all final and semifinal championship series from 1967 to 1993 with the exception of those involving four-game sweeps. The home team win-loss records and free throw data were obtained from Neft and Cohen (1992) and the daily box scores of the *Los Angeles Times*.

Results and Discussion

To gauge the magnitude of the confound between the home-court advantage and the strength of the teams based on their regular-season performance, we tabulated the outcomes of the championships as a function of regular-season record. The team with the better regular-season record won 64% of the time in the final game. Thus, the confound between home court and initial team strength was a substantial concern, to which we return shortly.

Table 8 presents the updated results of the championship games from 1967 through 1993. Following Baumeister and Steinhilber (1984), the results of Games 1–4 represent the combined home records for both teams, not just the home team in the last game. Despite the strong performance of the home team in recent years, the effect reported by Baumeister and Steinhilber was still significant overall when the home results of Games 1–4 were compared with the results of the last game, $\chi^2(1, N = 340) = 6.21, p < .02$. When the results were broken down into the outcomes of 5-, 6-, and 7-game series separately,

however, it can be seen that a "home-field disadvantage" characterized the outcome of only Game 6, in which the home team won only 41% of the time. The home team won the decisive game 60% of the time in five-game series (the exact performance of home teams in earlier games) and 58% of the time in seven-game series. In seven-game series, the home team won slightly more in Games 1–4 than in the decisive game, but (a) the difference was far from significant, $\chi^2(1, N = 95) = 1.50, p < .22$, and (b) a 58% winning record can hardly be called a disadvantage even if the comparison had been significant.⁷ Thus, in all but six-game series, the home team performed comparably early and late in championships.

What, then, might have happened in six-game series in which the home team won 70% of the time in early games and only 41% of the time in the decisive games, $\chi^2(1, N = 145) = 8.16, p < .01$? Table 9 presents the breakdown of NBA championship games based on both regular-season record and home court. As can be seen, only five of these series have played the sixth game at the home of the team with the better regular-season record, and the home team won three and lost two for a 60% winning record. The remaining series played the sixth game in the home of the team with the worse record, and that team won only 8 games and lost 15 games, for a winning record of only 35%, $\chi^2(1, N = 79) = 8.22, p < .01$, for the comparison of early versus decisive-game performance. In one additional six-game series, both teams had identical regular-season records, and the home team won the sixth game. Thus, poor performance at home in decisive sixth games pertained only to teams whose regular-season record characterized them as underdogs. The underdogs' decisive-game losses were not surprising given that the team with the better regular-season record won 64% of all series and, more specifically, won 64% of the decisive games in six-game series, regardless of court location. The underdog may get off to a fast start at home but ultimately succumbs to the efforts of the superior team (based on regular-season records).

⁷ Before 1967, the year in which Baumeister and Steinhilber (1984) began their tabulation of NBA stats, the home team performed extremely well in decisive NBA championship games, especially seventh games. Baumeister and Steinhilber began in 1967, instead of 1950 when the NBA was formed, arguing that before 1967, (a) the NBA was dominated by the Boston Celtics, who won eight straight championships, (b) the relative lack of media coverage lowered attainable prestige from a championship, (c) the size of the NBA was a fraction of what it is today, and (d) players' salaries were not what they are today, which may have reduced the pressure to play well as individuals. Although these considerations are certainly accurate, it is arguable how much, if any, they have affected the motivation or pressure to win (or avoid losing). Furthermore, the same statements could be made about baseball before division play in 1969 (e.g., the Yankees dominated, media coverage was less than today, salaries were relatively low, there were fewer teams). In any case, we tabulated the NBA final and semifinal results from 1950 to 1993, thus including the entire NBA era. The home team in Games 1–4 won 274 of 408 games (67%), which is slightly but not significantly more than the home team won in the last game (5, 6, or 7), winning 63 of 102 games (62%), $\chi^2(1, N = 510) = 1.06, p < .31$. Furthermore, the home team won 28 of 36 decisive games in seven-game series (78%), which is slightly but not significantly more than the home team won in Games 1–4 (68%), $\chi^2(1, N = 180) = 1.29, p < .26$. Thus, the data again show a home advantage; there is no evidence for a home choke when the entire NBA championship history is examined.

Table 9
National Basketball Association Final and Semifinal Home Team Performance as a Function of Regular-Season Standings

Game	Better record			Worse record		
	Wins	Losses	Win %	Wins	Losses	Win %
All series						
First 2 home games	90	38	70	84	44	66
Last home game	25	15	63	8	16	33
5-game series						
First 2 home games	26	10	72	18	18	50
Game 5 at home	12	5	71	0	1	0
6-game series						
First 2 home games	39	17	70	39	17	70
Game 6 at home	3	2	60	8	15	35
7-game series						
First 2 home games	25	11	69	27	9	75
Game 7 at home	10	8	56			

Note. These data exclude four series in which both teams had identical regular-season records; the home team in the final game won two and lost two of these evenly matched series.

(Parenthetically, the team with the better record performed as well late as early in championship series, $ps > .30$.) Once again, the decisive-game home choke does not seem to exist; its spurious appearance in basketball can be traced to the confound between team strength and the home-court advantage. (In calculating the Games 1–4 baselines shown in Table 9, we used each team’s own home-court performance in whichever two games of the first four it played at home. We regarded this as a more appropriate baseline than one that collapsed across the performance of both teams.)

Finally, Table 10 presents the data on free throws from 1967 to 1993. As can be seen, the home team performed about as well in last games as in early games, as did the visiting team; furthermore, the home and visiting teams did not differ either in early games or last games (all $ps > .10$). Once again, there was no evidence for a home choke.

General Discussion

There is no convincing evidence for a home-field championship choke that places the home team at a disadvantage in decisive contests. The home team has an advantage in all phases of a championship series. Throughout most of baseball history (1924–1949 and 1969–1993), the home team has had a pronounced advantage playing the decisive sixth or seventh game of a championship series at home (winning 60% of the time during these periods; 24 wins vs. 16 losses). Overall, there are no significant differences between how a team performs at home early versus late in championship series. Even with the huge effect reported by Baumeister and Steinhilber (1984) the addition of just the last 11 years worth of data turned the overall comparisons into ones that did not reach conventional levels of

significance. Anyone looking at the current data set, without knowledge of the earlier report, would be hard-pressed to argue for the conclusion that home teams choke in decisive games.

The appearance of a home choke emerged in Baumeister and Steinhilber’s (1984) research for several reasons. First, and most important, there was an aberrant period, 1950–1968, in which the visiting team won 9 of 11 World Series that went to seven games. There does not appear to be anything unique about that era that would suggest the pressures or incentives for winning were greater than they are today, although we suspect that some baseball fans may try to generate an explanation. More important, an examination of the errors that were made in those games disconfirms the ideas that the home players were choking when on the verge of victory or were committing more errors than the visitors. We can only conclude that this was a chance pattern of home losses, akin to tossing a series of tails in a row when flipping a coin. The addition to the data set of 11 years of World Series and league championship games diminished the impact of this aberrant string on the overall results and produced nonsignificant comparisons overall.

Second, comparing the home teams’ performance in Game 5 with the home teams’ performance in Games 1 and 2, which Baumeister and Steinhilber (1984) did when creating their omnibus “last game” measure, produced a distorted picture. The home team in Game 5 is not the home team in Games 1 and 2; these games were played in different parks with different teams being home and visitor. The home team in Game 5 was at home only in Games 3 and 4. When the appropriate home baseline (Games 3 and 4) is used for this comparison, it becomes clear that the home team performed similarly in early and last games at home. These problems together led to the conclusion, quite accurate at the time it was made, that the home team loses about 60% of the time in decisive World Series games.

In basketball, we found a different problem: Home-field advantage was confounded with the strength of the team on the basis of its regular-season record. But the conclusion is similar: There was no evidence for a home-field disadvantage in decisive games; instead, the home team usually had a pronounced advantage. The home team was advantaged overall and in decisive games (59% winning percentage in fifth and seventh games) except for the sixth game. In the sixth game, the home team tended to lose, but this team was also disproportionately the team with the poorer regular-season record (by virtue of the NBA sched-

Table 10
Free Throw Performance

Results	Home	Visitor
Games 1–4		
Scored	5,802	5,696
Missed	2,076	2,008
Scoring %	74	74
Last game		
Scored	1,545	1,509
Missed	580	509
Scoring %	73	75

uling procedure). When the confound in sixth game performance is taken into account, it is clear that a poor home performance in decisive games characterizes only the team with the poorer regular-season record. Furthermore, there is no evidence for the home team choking in decisive games and missing free throws.

Baumeister and Steinhilber (1984) proposed that errors are produced by self-attention, which is created by fan pressure when the home players are on the threshold of victory. However, play-by-play accounts of the seventh game of the World Series indicated that fielding errors were made three times more often when the home team was behind in the score rather than ahead. The image is that of home players, losing the game in front of their fans, pressing too hard and perhaps trying to do too much to make up the deficit. To the extent that self-consciousness and anxiety are involved in these errors, they are created by the anticipation of failure, not the distractions of impending success.

It is worth emphasizing that we are not contending that choking does not exist, only that it does not seem to exist in sports championships in the kinder form proposed by Baumeister and Steinhilber (1984). In fact, the kinder form of choking has not been demonstrated in any context. By a kinder form of choking, we mean poorer-than-usual task performance that is produced by the anticipation of success in front of supportive audiences. This is the type that was hypothesized by Baumeister and Steinhilber and that would place the home team at a *disadvantage* in decisive games. In contrast, there is considerable data to support a darker form of choking that is typified by self-doubts and self-consciousness in the sense of unwanted and aversive self-attention. In their analysis of social anxiety, Schlenker and Leary (1982, 1985) reviewed evidence indicating that the combination of self-doubts about one's performance and high motivation to impress others produces social anxiety and decrements in task performance. Consistent with this hypothesis, more recent research indicated that participants who anticipated they would do poorly on a task for which they were publicly accountable did much worse than those who either anticipated success or were not publicly accountable (Schlenker, 1987; Schlenker et al., 1991). Baumeister and his colleagues (Baumeister, 1984; Baumeister et al., 1985) have conducted controlled laboratory studies that suggest that choking occurs when public expectations are unrealistically high, participants doubt they can fulfill expectations, and participants become self-conscious about a publicly evaluated performance. Furthermore, research on social facilitation indicates that people who expect success at a task perform better in the presence of an evaluating audience, whereas those who expect failure perform worse (see Geen, 1991). Finally, our data on seventh-game errors in the World Series suggest that players may choke under pressure because their team has fallen behind in crucial games before the home fans, and not because their team is ahead and they are dreaming of victory. In all of these cases, it is the combination of social pressure, in the form of an important public performance, and self-doubts portending failure, that produce problems. People then become self-conscious, preoccupied with their problems, and distracted from the task at hand. Thus, we propose that choking has a dark side typified by self-doubts combined with high motivation to impress others.

Finally, one of the more striking patterns we found deals not

with choking under pressure but with triumphing over pressure. Baseball teams who were good enough to get to the sixth game of a championship series but were in a must-win, do-or-die situation because they were down two games to three, found ways to win (the home team in this position won 76% of the time and the visiting team in this position won 59% of the time). These teams had the ultimate challenge—win or be eliminated—and they won. The team that is behind must concentrate to avoid a mental or physical lapse, whereas the team that is ahead knows it has the luxury of having to win only one of the next two games. The edge thereby goes to the team that is behind in Game 6. Perhaps most people, not just professional athletes, are capable of rising to the challenge when they are in competition and one group knows it must win now, whereas the other group knows it only needs to win one time out of two.

In summary, the home field is an advantage during the regular season and during championships. For teams who want to be champions, there is no place like home.

References

- Ardrey, R. (1966). *The territorial imperative*. New York: Dell.
- Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, *46*, 610–620.
- Baumeister, R. F., Hamilton, J. C., & Tice, D. M. (1985). Public versus private expectancy of success: Confidence booster or performance pressure? *Journal of Personality and Social Psychology*, *48*, 1447–1457.
- Baumeister, R. F., & Steinhilber, A. (1984). Paradoxical effects of supportive audiences on performance under pressure: The home field disadvantage in sports championships. *Journal of Personality and Social Psychology*, *47*, 85–93.
- Benjafield, J., Liddell, W. W., & Benjafield, I. (1989). Is there a home field disadvantage in professional sports championships? *Social Behavior and Personality*, *17*, 45–50.
- Bernstein, D. A., Roy, E. J., Sruell, T. K., & Wickens, C. D. (1988). *Psychology*. Boston: Houghton Mifflin.
- Brehm, S. S., & Kassir, S. M. (1993). *Social psychology* (2nd ed.). Boston: Houghton Mifflin.
- Brown, B. B. (1987). Territoriality. In D. Stokols & I. Altman (Eds.), *Handbook of environmental psychology* (Vol. 1, pp. 505–531). New York: Wiley.
- Carver, C. S. (1979). A cybernetic model of self-attention processes. *Journal of Personality and Social Psychology*, *37*, 1251–1281.
- Courneya, K. S., & Carron, A. V. (1992). The home advantage in sport competitions: A literature review. *Journal of Sport and Exercise Psychology*, *14*, 13–27.
- Cox, R. H. (1985). *Sports psychology: Concepts and applications*. Dubuque, IA: Brown.
- Edwards, J. (1979). The home-field advantage. In J. H. Goldstein (Ed.), *Sports, games, and play: Social and psychological viewpoints* (pp. 409–438). Hillsdale, NJ: Erlbaum.
- Forsyth, D. R. (1990). *Group dynamics* (2nd ed.). Pacific Grove, CA: Brooks/Cole.
- Gayton, W. F., Matthews, G. R., & Nickless, C. J. (1987). The home field disadvantage in sports championships: Does it exist in hockey? *Journal of Sports Psychology*, *9*, 183–185.
- Geen, R. G. (1991). Social motivation. *Annual Review of Psychology*, *42*, 377–399.
- Heaton, A. W., & Sigall, H. (1989). The "Championship Choke" revisited: The role of fear of acquiring a negative identity. *Journal of Applied Social Psychology*, *19*, 1019–1033.

- James, B. (1988). *The Bill James historical baseball abstract* (Rev. ed.). New York: Villard Books.
- Langer, E. J., & Imber, L. G. (1979). When practice makes imperfect: Debilitating effects of overlearning. *Journal of Personality and Social Psychology*, 37, 2014–2024.
- Lea, S. E. G. (1984). *Instinct, environment and behavior*. London: Methuen.
- LeUnes, A. D., & Nation, J. R. (1989). *Sport psychology: An introduction*. Chicago: Nelson-Hall.
- Martindale, D. (1971). Territorial dominance behavior in dyadic verbal interactions. *Proceedings of the 79th Annual Convention of the American Psychological Association*, 6, 305–306.
- Myers, D. G. (1993). *Social psychology* (4th ed.). New York: McGraw-Hill.
- Neft, D. S., & Cohen, R. M. (1990). *The World Series*. New York: St. Martin's Press.
- Neft, D. S., & Cohen, R. M. (1992). *The sports encyclopedia: Pro basketball* (5th ed.). New York: St. Martin's Press.
- Reichler, J. L. (Ed.). (1985). *The baseball encyclopedia* (6th ed.). New York: Macmillan.
- Roediger, H. L., Capaldi, E. D., Paris, S. G., & Polivy, J. (1991). *Psychology* (3rd ed.). New York: Harper Collins.
- Rubin, J. Z., & Brown, B. R. (1975). *The social psychology of bargaining and negotiation*. New York: Academic Press.
- Sabini, J. (1992). *Social psychology*. New York: Norton.
- Schlenker, B. R. (1987). Threats to identity: Self-identification and social stress. In C. R. Snyder & C. E. Ford (Eds.), *Coping with negative life events: Clinical and social psychological perspectives* (pp. 273–321). New York: Plenum Press.
- Schlenker, B. R., & Leary, M. R. (1982). Social anxiety and self-presentation: A conceptualization and model. *Psychological Bulletin*, 92, 641–669.
- Schlenker, B. R., & Leary, M. R. (1985). Social anxiety and communication about the self. *Journal of Language and Social Psychology*, 4, 171–193.
- Schlenker, B. R., Weigold, M. F., & Doherty, K. (1991). Coping with accountability: Self-identification and evaluative reckonings. In C. R. Snyder & D. R. Forsyth (Eds.), *The handbook of social and clinical psychology* (pp. 96–115). New York: Pergamon.
- Schwartz, B., & Barsky, S. F. (1977). The home advantage. *Social Forces*, 55, 641–661.
- Silva, J. M., & Andrew, J. A. (1987). An analysis of game location and basketball performance in the Atlantic Coast Conference. *International Journal of Sport Psychology*, 18, 188–204.
- Siwoff, S., Hirdt, S., Hirdt, T., & Hirdt, P. (1985–1993). *The Elias baseball analyst*. New York: Simon & Schuster.
- Thorn, J., & Palmer, P. (1984). *The hidden game of baseball*. Garden City, NY: Doubleday.
- Varca, P. E. (1980). An analysis of home and away game performance of male college basketball teams. *Journal of Sport Psychology*, 3, 149–165.
- Weiten, W., Lloyd, M. A., & Lashley, R. L. (1991). *Psychology applied to modern life: Adjustment in the 90s* (3rd ed.). Pacific Grove, CA: Brooks/Cole.
- Worchel, S., Cooper, J., & Goethals, G. R. (1991). *Understanding social psychology* (5th ed.). Pacific Grove, CA: Brooks/Cole.
- Wright, C. R., & House, T. (1989). *The diamond appraised*. New York: Simon & Schuster.

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