

Do Dramatic Wins Matter?

Brian Connolly

www.idealjungle.com

BrianConnolly at-sign idealjungle dotcom

The Thrilling, Ninth Inning Win

The true fan never leaves a game early. We stay to the final out, and we hope. It doesn't happen often, but each of us can remember a few games where our faith was vindicated. Who can forget Mookie's slow dribbler down the line towards Bill Buckner? Or Kirk Gibson limping around the bases after ending game 1 of the 1988 World Series with a pinch hit home run?

We see sports as an expression of character, and when a team comes from behind late in the game we feel like something essential is revealed to us. We look upon our team differently after that. No one denies that the raw material of skills and talents is decisive in the long run, but even the most number-driven analyst believes that character has some role to play in winning. It's only natural to think that a team that believes in itself will pull out a few games that would otherwise have been lost.

It's so easy to think that these wins *mean something*. This study is an attempt to examine the basis of that belief. It uses ninth inning, come from behind wins at home as the sort of dramatic, lightning-strike turning points that ought to have an effect on a team. This is an analysis of team performance before and after those thrilling wins.

Methodology

The study was based on [Retrosheet](#) game logs from 1978-2000. 1978 was used as the first year because that was the first year in which inning by inning line scores are available. Game log data was loaded into a Microsoft SQL server database. A search was done for all games where the home team won by fewer runs than they scored in the bottom of the ninth inning. These games formed the event set, and the following data was gathered for each event:

- The "degree" or the magnitude of the victory. A game where the home team came from one run behind in the ninth is considered degree one. Degree two means that the home team came from two runs behind. There were 742 games of degree one, and at the other extreme one game each of degree six and degree seven.
- The average winning percentage of all the winning teams by degree. This averages the won-lost records of the winning team in the year in which the come from behind victory occurred. Note that this is weighted by the number of come from behind wins a team has in a year. A team with three such wins in year N will have its won-loss record counted three times that year, while a team that has one such win will count only once.
- The winning team W-L percentage before and after the event. Thinking that any boost in performance would dissipate quickly, I compared the winning percentage ten days before and after, five days before and after, and finally any games within two days of the comeback win.

Results

Runs Behind	Games	Winner Year W/L	Winner W/L 10 Days Before	Winner W/L 10 Days After	Winner W/L 5 Days Before	Winner W/L 5 Days After	Winner W/L Day Before	Winner W/L Day After
1	742	0.508	0.513	0.508	0.538	0.516	0.580	0.526
2	224	0.504	0.528	0.498	0.558	0.511	0.538	0.532
3	84	0.510	0.490	0.500	0.507	0.519	0.506	0.534
4	28	0.501	0.498	0.502	0.560	0.495	0.577	0.500
5	11	0.510	0.478	0.558	0.475	0.649	0.750	0.800
6	1	0.463	0.500	0.667	0.750	0.500	1.000	1.000
7	1	0.568	0.625	0.750	1.000	0.750	1.000	1.000

The average yearly winning percentage is close enough to .500 in the frequently occurring cases to show that wins like this are just as common for bad teams as for good teams. Clubhouse talk after these events inevitably highlights the character and tenacity of the winning team, but if these victories have any effect in the won-loss record after the game it simply doesn't show in the data. In fact, in the most frequent case, the more than nine hundred games where teams came from one or two runs behind -- *the winning teams actually did worse afterwards than they did before.*

"Unexpected" Wins

It's been said that it's a different matter when a poor team beats a good one. The good team expects to win, and so when they come from behind in the ninth it's more like a vindication than a boost to morale. So I did the same analysis, but restricted it to those instances where the winning team was much worse than the losing team. "Much worse" teams have more than .100 points lower overall winning percentage than the losing team during the year in which the victory took place. For example, I took only those games where a .440 team beat a .554 team, or a .515 team beat a .620 team, and excluded games where a .500 team beat a .550 team.

The table below summarizes the results from just those instances. Only about 13% of the dramatic wins were cases where a team beat a much better team. The team that won the surprising victory didn't seem to get any significant lift in subsequent games.

<i>Runs Behind</i>	<i>Games</i>	<i>Winner Year W/L</i>	<i>Winner W/L 10 Days Before</i>	<i>Winner W/L 10 Days After</i>	<i>Winner W/L 5 Days Before</i>	<i>Winner W/L 5 Days After</i>	<i>Winner W/L Day Before</i>	<i>Winner W/L Day After</i>
1	84	0.428	0.418	0.429	0.420	0.431	0.431	0.438
2	32	0.405	0.397	0.371	0.482	0.336	0.464	0.333
3	11	0.421	0.424	0.451	0.447	0.436	0.300	0.500
4	6	0.417	0.340	0.298	0.348	0.150	0.500	0.167
5	2	0.401	0.400	0.400	0.500	0.429	0.500	0.500

Areas for Further Investigation

There are two areas where further investigation might prove interesting:

1. Is any type of game significant? It's April, and your team has just won a game by fifteen runs -- should you increase your bet on the season? Suppose your team just lost a game, and they committed five errors? Is it ever rational for a bettor to change a seasonal bet on the basis of a particular early season win or loss?
2. Perhaps late inning wins make a difference, but the difference is more subtle than this study would reveal. One way of looking at a 162 game season is that about a hundred games a year are essentially meaningless. Both good teams and bad teams will each win and lose about fifty games. What makes a team good is that it wins a very high percentage of remaining games that are "winnable" by either team. It's possible that the morale effect of a ninth inning win can only have effect in relatively close games, so it might be interesting to repeat this analysis, but limit the domain to close games before and after the event.
3. Craig Tomarkin, of BaseballGuru.Com noticed this: If you look at the degree one games, notice that teams that came from behind to win had a .580 winning percentage the day before, well above the seasonal average of .508. They were also doing better five and ten days before the pivotal game. This is quite interesting, because it suggests that teams are more likely to come from behind when they are hot. Further study is needed, to see if the difference in winning percentage is statistically significant.

-- May, 2002

The play by play information used here was obtained free of charge from and is copyrighted by Retrosheet. Interested parties may contact Retrosheet at 20 Sunset Rd., Newark, DE 19711.