Conor McCarthy 02/02/2024

Is the ‘new manager bounce’ a myth?

What is the ‘new manager bounce’?

A ‘new manager bounce’, often spoken about in the media, is when a new manager joins a football team and the team receives a 'bounce', where results are better than they normally would be.

What is the threshold of matches considered to be within a “bounce” period?

For my analysis, I used a threshold of a new manager's first **5 matches** as being within the ‘bounce’ period.

What data was used?

League/season dataset used	Premier League 2015/16
Number of managerial changes ***(excluding preseason)***	8
Teams that had a managerial change	Sunderland, Liverpool, Swansea (x2), Aston Villa (x2), Chelsea, and Newcastle

What metric is used to compare teams with/without a new manager bounce?

For this analysis, I compared teams’ **points per game (PPG)** in the 5 matches after a new manager was hired versus their PPG during the rest of their matches. It could be argued that a ‘new manager bounce’ should only be compared against matches before the new manager was hired, but I felt that the ‘new manager bounce’ should be a particularly successful period and should stand out from all performances over the whole season if it’s considered to really be a ‘bounce’.

What defines a ‘significant’ difference between the bounce/non-bounce periods?

Comparing the two periods (bounce/non-bounce) PPG, I used an **independent samples t-test**, to test if there was a statistical difference between the two periods, with the following hypotheses:

> *Null hypothesis* H_0: PPG during bounce period = PPG during non-bounce period.
>
> *Alternative hypothesis* H_1: PPG during bounce period > PPG during non-bounce period.

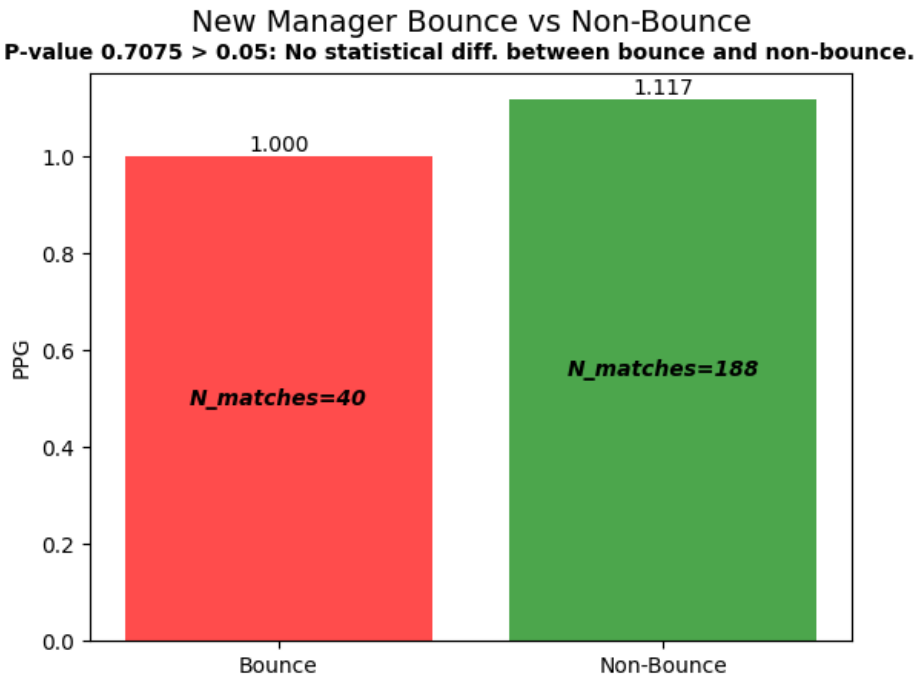
If the **p-value** from this test **is greater than** our significance level **0.05**, then we **accept** H_0 and conclude that there is no difference between bounce and non-bounce periods.

If the p-value is lower than 0.05, then we can conclude that the new manager bounce is a real phenomenon where teams gain more points than they normally would.

Results:

I've split the results into two sections, the first combines all 6 teams that had at least one managerial change and compares all their combined 'bounce' periods against their combined 'non-bounce' periods. The second compares the two periods for each individual team.

1. Combined Bounce vs. Non-Bounce periods:



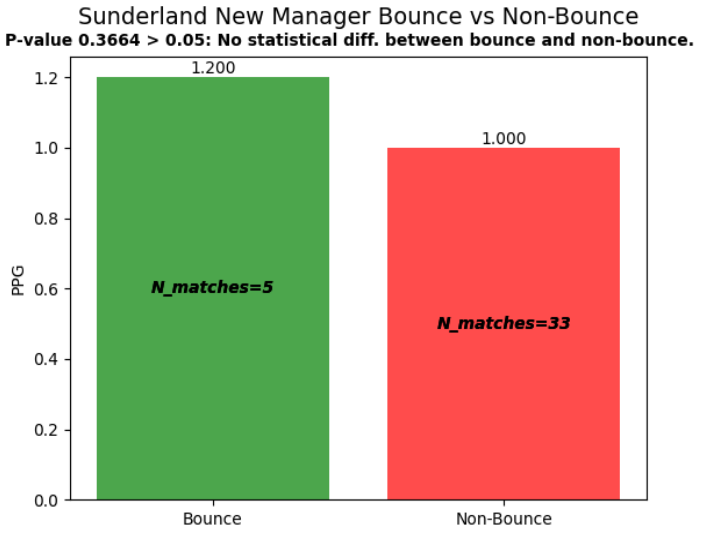
From this analysis, we can conclude that for teams that had at least one managerial change during the Premier League 2015/16 season, there was no statistical difference in PPG between the new manager's first 5 games and the rest of the teams' games. Judging by the data used for this analysis, the new manager bounce is purely a myth.

2. Individual teams Bounce vs. Non-Bounce periods:

Team
Sunderland

Manager(s) that left (date left)
Dick Advocaat (2015-10-04)

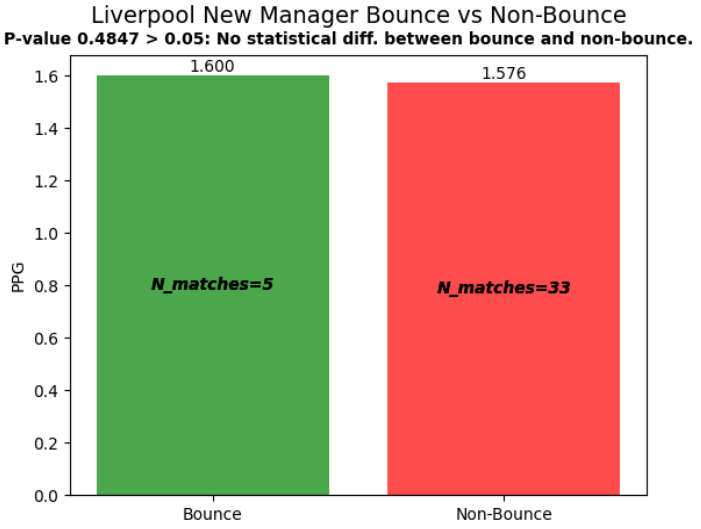
Manager(s) hired (date hired)
Sam Allardyce (2015-10-09)



Team
Liverpool

Manager(s) that left (date left)
Brendan Rodgers (2015-10-04)

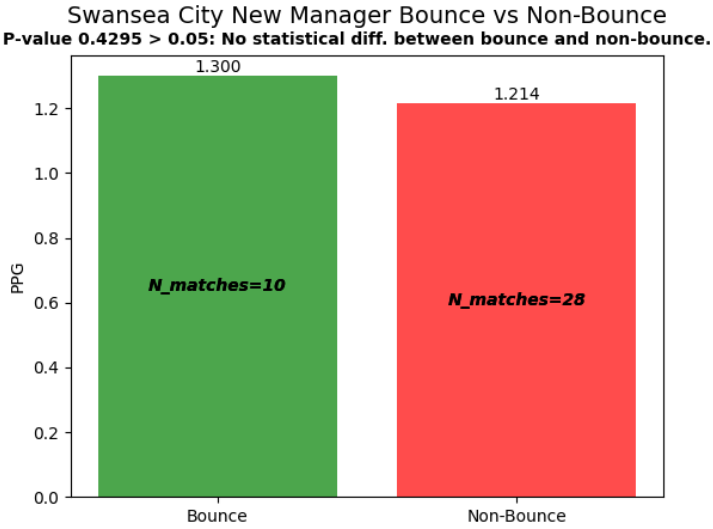
Manager(s) hired (date hired)
Jürgen Klopp (2015-10-08)



Team
Swansea City

Manager(s) that left (date left)
Garry Monk (2015-12-09)
Alan Curtis (2016-01-18)

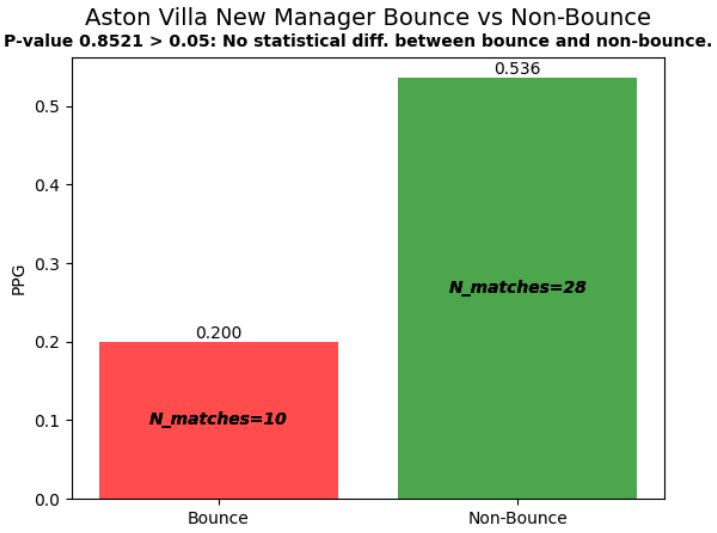
Manager(s) hired (date hired)
Alan Curtis (2015-12-09)
Francesco Guidolin (2016-01-18)



Team
Aston Villa

Manager(s) that left (date left)
Tim Sherwood (2015-10-25)
Remi Garde (2016-03-29)

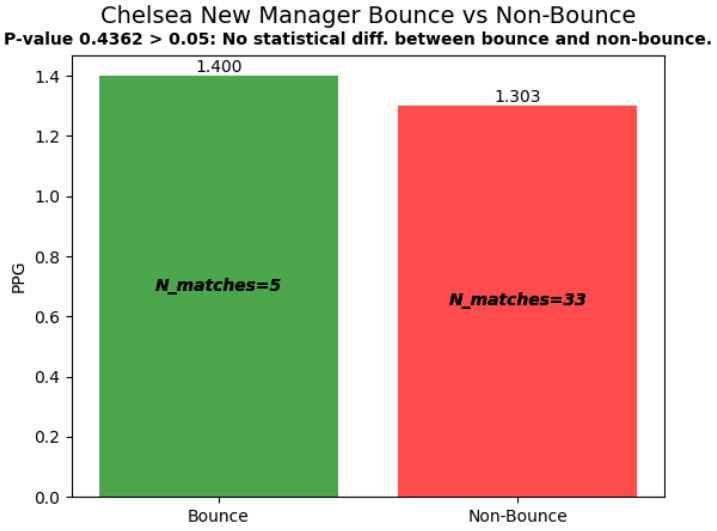
Manager(s) hired (date hired)
Remi Garde (2015-11-02)
Eric Black (2016-03-29)



Team
Chelsea

Manager(s) that left (date left)
José Mourinho (2015-12-17)

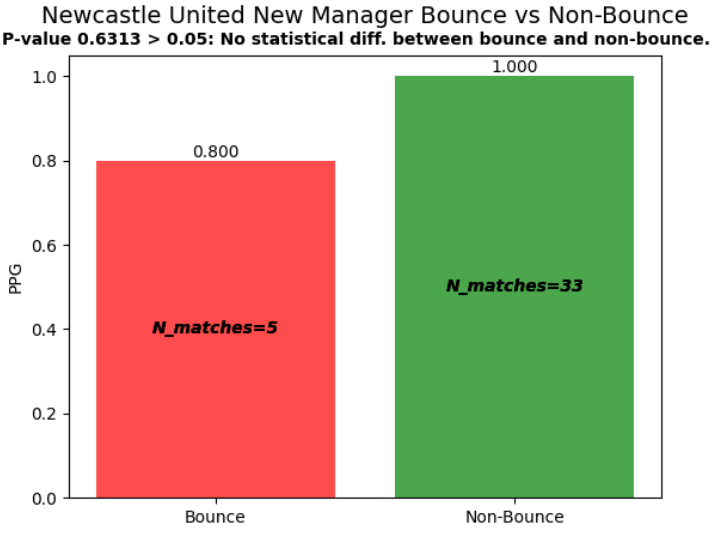
Manager(s) hired (date hired)
Guus Hiddink (2015-12-20)



Team
Newcastle United

Manager(s) that left (date left)
Steve McClaren (2016-03-11)

Manager(s) hired (date hired)
Rafael Benitez (2016-03-11)



Looking at each individual team where a managerial change occurred below, there are no teams where the PPG during the ‘bounce’ period was statistically greater than the PPG during the ‘non-bounce’ period. Four teams had larger average PPG during ‘bounce’ periods (Sunderland, Liverpool, Swansea, and Chelsea), but, looking at their p-values in the graphs from their t-tests, we can see that none of them are below the 0.05 significance level.