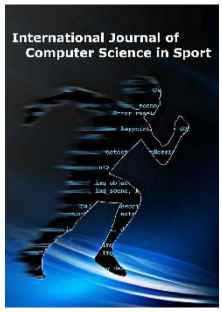
International Journal of Computer Science in Sport

Volume 17, Issue 2, 2018

Journal homepage: http://iacss.org/index.php?id=30

sciendo

DOI: 10.2478/ijcss-2018-0007



Rest vs. Rust: The Effect of Disproportionate Time Between Rounds of a Playoff Series

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Abstract

This study analyzed the effect of a disproportionate amount of time between rounds of a playoff series—known as the "rest vs. rust" debate in the popular sports media—on the likelihood of winning each game of the subsequent round of the tournament. We utilized NBA Finals data from 1984−2018, and analyzed this phenomenon using ordered logistic regression with a categorical dependent variable representing the margin of victory of each game. In addition to several control variables, variables reflecting the difference in the time between series for the two teams were used to measure this effect. The results indicate that having additional time between rounds of the series provides a statistically significant advantage; interestingly, though, it has more of an impact on the second game of the subsequent round than it does for the first game. Teams may utilize the results of this study when deciding on how to schedule and intensify their practice sessions, by providing appropriate rest and maintaining rhythm to increase the likelihood of winning each game.

KEYWORDS: ORDERED LOGISTIC REGRESSION, PLAYOFF SERIES, EFFECT OF REST, NBA FINALS

Introduction

"*If you rest, you rust*." (Hayes, 1990)

A "best-of-*n*" format is frequently used in each round of elimination tournaments used by professional sports leagues to determine their champion. For example, the National Basketball Association (NBA) playoffs utilize four best-of-seven rounds, with the winner of each round advancing to the next round and the loser being eliminated from the tournament. An interesting aspect of the "best-of-*n*" format is that teams need not play the same number of games to advance. In a best-of-seven series, a team can win the series in as few as four games, giving them additional time off until the subsequent round of the tournament begins.

On 27 May 2013, the San Antonio Spurs won the Western Conference for the right to advance to the NBA Finals. Seven days later, on 3 June 2013, the Miami Heat won the Eastern Conference to join the Spurs in the Finals. Immediately, the popular press questioned whether nine days of rest vs. two would result in an advantage or a disadvantage (see, for example, Jones, 2013). On one hand, the additional rest would help reduce fatigue—physiological and/or psychological—and provide additional time to analyze and practice for the specific competition; however, it may also result in a disadvantage due to a loss of momentum/rhythm and the time off from playing at game speed (Balke, 2018). When asked if it was better to be rested or in rhythm entering a playoff series, Gregg Popovich, head coach of the San Antonio Spurs stated, "I've got no clue. We'll try to do our best." (CBS Miami, 2013).

The rest vs. rust debate is not exclusive to the NBA. It has been mentioned with regards to Major League Baseball (Karpuk, 2014), the National Hockey League (Gove, 2015), the National Football League (Davis, 2010), collegiate basketball (Jardy, 2018) and other sports. And the effects are particularly important in the playoffs, where the outcome of each game is crucial for advancing through a best-of-*n* series. Therefore, an understanding of the effects of disproportionate time between the rounds of a playoff series would be indispensable for a team competing in such a series.

The purpose of this research is to determine whether additional rest between rounds of a playoff series is beneficial or detrimental to a playoff team and, if so, how much of an effect it might have on the margin of victory and the probability of winning a game. An understanding of these effects would be quite useful for a playoff team in deciding on how to schedule and intensify their practice sessions in order to provide appropriate rest, while maintaining the team's rhythm, to maximize the likelihood of winning the series. Despite the importance of winning each game in a playoff series and the attention received in the popular literature, no research to date has identified specifically what the effect of additional time between rounds has on subsequent game outcomes and the likelihood of advancing to the next round.

The remainder of this paper is as follows. A review of the relevant literature is provided in the next section. The subsequent section identifies the data used in the analysis as well as the model specification. The results of a mixed-effects, ordered logistic-regression analysis are then presented. A discussion of the results and the limitations of the study follow. Finally, we conclude the paper.

Related Work

As often as the rest vs. rust debate has been discussed in the popular literature, surprisingly little research has been conducted in this area. Steenland and Deddens (1997) analyzed the effect of travel and rest over eight NBA regular seasons. Based on a regression analysis used to predict the margin of victory, they found a significant effect of having days off between games and that the beneficial effect tends to peak at three days between games. Additional time off—according to the authors—results in players losing "sharpness" and a decline in the benefit of rest.

Entine and Small (2008) also considered the role of rest during the NBA regular season. The margin of victory is significantly higher for teams that have three or more days off than if they play a game the following day; the effect of one or two days' rest relative to three or more days off was not significant. There was also no significant difference in this effect for the home team compared to the visiting team. They also conducted a logistic regression to determine the effect of additional days off on winning the game; the increase in the probability of winning the game is moderately significant (at the 10 percent level of significance) for teams that have three or more days off than if they play a game the following day.

A related area of interest in the sports-economics literature is that of wagering markets, in which the focus is on the point spread rather than the margin of victory. Ashman et al. (2010) analyzed the point spreads of nineteen NBA regular seasons and found that the home team failed to cover the spread when playing the second of back-to-back games with the visiting team having one or two days off. They also noticed that this effect decreased with additional time off, stating that "the fatigue factor needs to be balanced with the need for players to stay 'sharp'." Sung and Tainsky (2014) recently considered the wagering market for the National Football League and found that there is a bias in betting strategies in games after a team's bye week. They concluded that the betting market tends to underestimate the effect of the bye week on a team's performance.

Other related research includes that of Nutting (2010) who analyzed the effect of travel during the NBA regular season and found that teams are more likely to win with additional days off. As part of a study on game-to-game momentum during the NBA regular season, Arkes and Martinez (2011) accounted for rest days and only found moderate significance (at the 10 percent level) for no day's rest vs. two-or-more days' rest for the home team. Scoppa (2013) investigated the effect of fatigue on team performance in the FIFA World Cup and UEFA European Championship and found that the number of days between matches had no significant effect in terms of goal difference or points gained. Brown and Minor (2014) discussed the concept of the spillover effect in elimination tournaments, in which past efforts affect the outcome of the current stage. Among other things, they noted that this may include momentum (positive spillover) or it may reflect fatigue (negative momentum), and they empirically identified negative spillover in professional tennis matches. Hill (2017) tested for spillover effects in the NBA playoffs and found that additional games played by the series favorite resulted in a higher likelihood that the team will win a subsequent game; on the other hand, the number of games previously played by the series underdog has no significant impact.

To date, no research has analyzed the effect that additional time between rounds of a playoff series has on the likelihood of winning each of the subsequent games in the series. The scheduling of a playoff series is considerably different than that of the regular season, and the consequences of losing a game are also much more considerable.

Methods

Data

The data used in our primary analysis are taken from the 1984−2018 NBA Finals, spanning 35 seasons and 198 games. This timeframe is particularly appropriate, since the playoffs expanded from 12 to 16 teams in 1984; thus, both teams will have advanced through three rounds of the playoffs before the Finals. Prior to 1984, the two teams could have played an unequal number of rounds; for example, in 1982, the Philadelphia 76ers had to survive three rounds to make it to the Finals, while the Los Angeles Lakers only required two. Also, in the earlier rounds of the playoffs, the best teams are paired against the lowest-ranked teams, so they will be more likely to finish the series early and get more time between series; by restricting the analysis to the Finals, there is a greater likelihood the two teams will be of similar quality. The relevant data for each of the games through 2011 were obtained from *databaseBasketball.com* (2013); data for 2012 through 2018 were retrieved from *nba.com* (2018).

Later in our presentation, we will conduct additional analyses as a robustness check, in which the timeframe under consideration will extend from 1956 through 2018. While this provides additional observations, the two teams in the Finals may not have played the same number of rounds earlier in the playoff series. From 1977 through 1983, twelve teams were in the tournament, resulting in instances when one team played three series before the finals and the other team only playing two. Ten teams were included in the playoffs in 1975 and 1976, eight teams from 1967 through 1974, and six teams from 1956 through 1966. Thus, the data would not be considered as "clean" as that described in the previous paragraph, but can give us additional confidence in our results. The relevant data for each of the games prior to 1984 were also obtained from *databaseBasketball.com* (2013).

Variables

The dependent variable under consideration is the margin of victory for each game in the Finals. We define this variable to be the final score of the team given home-court advantage (in the NBA, this is the team with the better regular-season record, hereafter referred to as the "referent" team) minus the final score of the opposing team. Thus, it will take on positive values when the referent team wins the game and negative values when the opposing team wins. The distribution of this variable is shown in Figure 1.

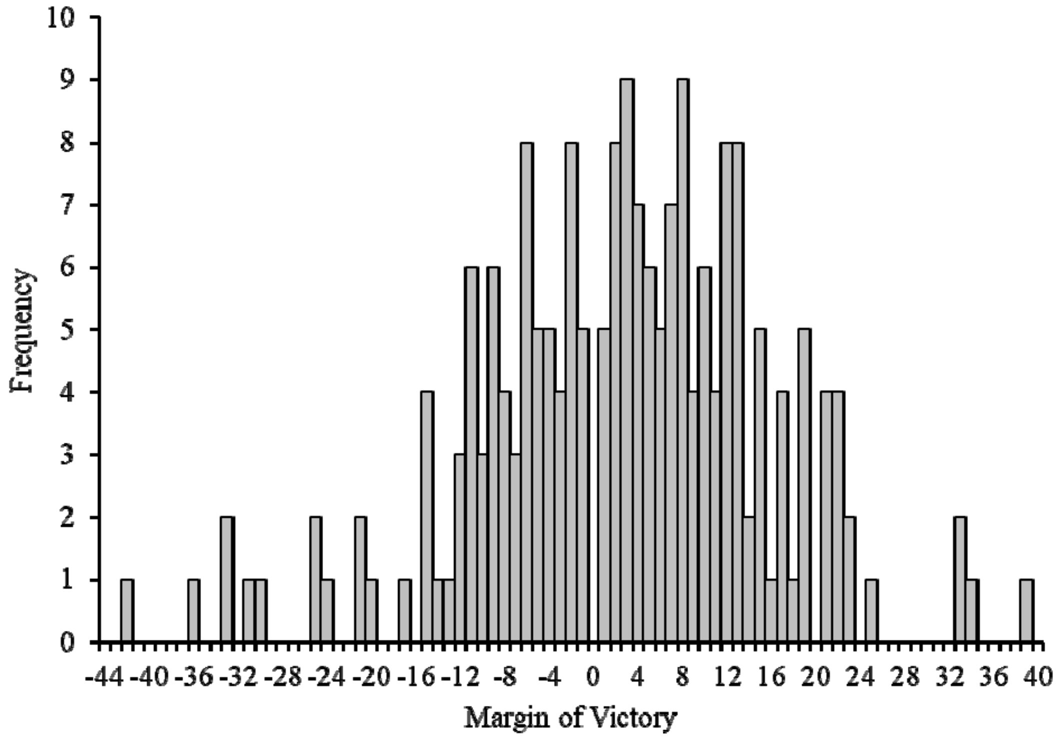

Figure 1. Margin-of-victory distribution, NBA Finals 1984−2018.

Since margin of victory must be an integer value and cannot take on a value of zero, the use of ordinary least squares (OLS) regression may be inappropriate; Simonoff (2003) notes several problems with using OLS regression with an integral dependent variable, noting concerns with nonnormality and heteroscedasticity. Thus, we will utilize ordered polytomous logistic regression to analyze the effect of differences in the time between series on the game outcome. Due to the sparsity of the data (as seen in Figure 1, no NBA Finals game has had a 26-point margin of victory since 1984, only one has had a margin of 16 points, etc.), the data are grouped into seven categories of similar frequencies for the ordered logistic regression, as shown in Table 1. As seen in the table, the referent team won 119 games from 1984 to 2018 while the opposing team won 79, so there are four categories for which the referent team won and three for which the opposing team won.

Table 1. Number of wins by the referent and the opposing teams categorized by the margin of victory (i.e., the difference in the number of points scored by the two teams).

		1984−2018		**1956−2018**	
Category	**Margin of Victory**	**Wins Referent**	**Wins Opposing**	**Wins Referent**	**Wins Opposing**
1	16+	26		47	
2	11−15	27		50	
3	6−10	31		52	
4	1−5	35		63	
5	1−5		27		58
6	6−10		24		48
7	11+		28		41

To model the effect of differences in the time between series for the two teams, we consider the number of days off from the Conference Finals to the NBA Finals, and use the difference between that of the referent team and that of the opposing team. During the regular NBA season, Steenland and Deddens (1997) found that peak performance for each team occurred with three days of rest between games, and Entine and Small (2008) found that the only significant effect on performance was when one team had three or more additional days of rest than the other team (at a 10 percent level of significance). Thus, the following four variables are included in our analysis:

$$REST_j = \begin{cases} +1 & \text{if referent team had 3 or more additional days off in game } j \text{ of series} \\ 0 & \text{if neither team had 3 or more additional days off in game } j \text{ of series} \\ -1 & \text{if opposing team had 3 or more additional days off in game } j \text{ of series} \end{cases} \quad (1)$$

where j = 1, 2, 3, and 4+ (4, 5, 6 or 7) to distinguish the effect on each game of the series. Note that we combine games 4 through 7 because the effect of differences in time off between the two teams would be expected to have diminished by this time, and there were only six instances where the opposing team had four or more additional days off (two series only went to game 4, one series to game 5, one to game 6, and two to game 7). Table 2 provides the frequencies for 1984−2018 and 1956−2018.

Table 2. Number of seasons the referent team ($REST_j = +1$), opposing team ($REST_j = -1$), or neither team ($REST_j = 0$) had three or more additional days between series.

$REST_j$	1984−2018	1956−2018
+1	12	17
0	17	33
−1	6	13

In addition to the $REST_j$ variables, several other control variables that have been shown to be significant in predicting game outcome are included (see Urban, 2012, for a detailed discussion of each). First, the relative team quality is measured as the difference in the regular-season winning percentage of the two teams (see, for example, Martin & Troendle, 1999):

$$QUAL = 100 \times (PCTREF - PCTOPP) \tag{2}$$

where $PCTREF$ and $PCTOPP$ are the regular-season winning percentages of the referent and opposing teams, respectively (note, the odds approach of Schilling (1994) provides similar results). Momentum is modeled as an exponentially-weighted function of the game outcomes (win/loss) of the previous games of the series (Albright, 1993):

$$MNTM = \sum_{m<i} [\varphi^m \times WIN_{i-m}] \tag{3}$$

where $WIN_{i-m} = +1$ ($= -1$) if the referent (opposing) team won the contest m games before the current game, i, of the series, and φ is a smoothing parameter to give more weight to recent games. Mizruchi (1991) and Arkes and Martinez (2011) discuss the effect of momentum in the NBA. Finally, indicator variables are used for home-court advantage, $HOME$ (Jamieson, 2010), Finals experience in the previous year, $EXPR$ (Ferrall & Smith, 1999), and the back-to-the-wall effect when facing elimination, $BACK$ (Simon, 1977; Swarz et al., 2011).

Statistical Analysis

As mentioned in the previous section, we use ordered polytomous logistic regression to analyze whether a disproportionate time between the rounds of the playoff is statistically significant in determining the margin of victory of an NBA Finals game. The direction and significance of the $REST_j$ variables will address the rest vs. rust question. To further support our results, we consider two extensions of our model. First, we expand the time frame under consideration. Then we make an explicit distinction of the rest vs. rust effect for the referent and opposing teams.

The particular model we use is the proportional-odds form of the cumulative-logit model, which can be expressed as (see, for example, Agresti, 2013):

$$logit[Prob(MRGN \leq \ell)] = \alpha_\ell + \sum_{j=1}^{4} \beta_j REST_j + \sum_{k=1}^{6} \gamma_k CONT_k \qquad \ell = 1, \dots, 6 \tag{4}$$

where $MRGN$ is the seven-category dependent variable derived from the margin of victory, $REST_j$ are the four variables measuring the difference in time off for the two teams, and $CONT_k$ are the six control variables described in the previous section ($QUAL$, $MNTM$, $HOME$, $EXPR$, and $BACK$) plus a quadratic term ($QLSQ = QUAL^2$) to allow for potential nonlinearities, such as diminishing marginal effects. Note there are six intercepts for the seven-category dependent variable to measure how likely an observation will be in category ℓ or below (of course, the probability that $MRGN \leq 7$ will be 1.0). For example, α_3 would represent how likely an observation (game) will be in category 3 or below; in other words, how likely the referent team is to win the game by six or more points.

Furthermore, the NBA Finals are a best-of-seven series with the games clustered within each series, so it would not be appropriate to treat all 198 observations as independent. Our sample from 1984−2018 is composed of 35 subjects (series), and within each series are from four to seven repeated measurements (games). The games within each series may be correlated somewhat due to factors not explained by the rest and control variables; for example, the Cleveland Cavaliers lost two all-star players in Kyrie Irving and Kevin Love in the 2015 NBA Finals due to injuries (Mutoni, 2015). Thus, we consider a generalized linear mixed model; in particular, a longitudinal, random-intercepts form of the proportional-odds model with fixed effects given in Equation (4). The GLIMMIX procedure of SAS (2014) will be used for this analysis, including a likelihood-ratio test for the random-intercept variance, $H_0: \sigma_u^2 = 0$, to evaluate whether the mixed-effects model is appropriate.

Results

Table 3 presents the results of this analysis—shown are the parameter estimates, standard errors, and *p*-values—using NBA Finals data from 1984 through 2018. The likelihood-ratio test is significant at the ten percent level of significance (*p*-value = 0.071), suggesting the mixed-effects model is appropriate (for brevity, the random-effects estimates are not shown in the table, only the estimate of the random-intercept variance, $\hat{\sigma}_u^2$).

Table 3. Parameter estimates for ordered logistic-regression model using 1984−2018 data.

Parameter	Estimate	Std Error	*p*-value
Intercept1	−3.08	0.506	<0.001
Intercept2	−2.06	0.477	<0.001
Intercept3	−1.22	0.463	0.014
Intercept4	−0.36	0.456	0.443
Intercept5	0.39	0.457	0.398
Intercept6	1.29	0.471	0.011
$REST_1$	0.55	0.465	0.234
$REST_2$	1.07	0.474	0.026
$REST_3$	0.31	0.471	0.513
$REST_{4+}$	0.12	0.337	0.733
QUAL	0.17	0.099	0.100
QLSQ	−0.01	0.005	0.230
MNTM	−0.65	0.274	0.019
HOME	0.59	0.135	<0.001
EXPR	0.53	0.260	0.052
BACK	0.38	0.323	0.245
$\hat{\sigma}_u^2$	0.52		0.071

The control variables representing home-court advantage, game-to-game momentum effects, previous NBA Finals experience, and relative team quality are statistically significant at the one, five, ten, and ten percent levels of significance, respectively (*p*-values are <0.001, 0.019, 0.052, and 0.010, respectively). The other control variables are not statistically significant in this mixed-effects model (*p*-values are 0.230 and 0.245 for *QLSQ* and *BACK*, respectively).

The coefficients of the $REST_j$ variables are positive, indicating that having a longer span between rounds of the playoff will provide an advantage in winning the games. However, they are not statistically significant for games one, $REST_1$, three, $REST_3$, or four through seven, $REST_{4+}$ (p-values are 0.234, 0.513, and 0.733, respectively). The variable for the second game, $REST_2$, is significant at the five percent level (p-value = 0.026) with a coefficient of 1.07.

To illustrate the effect on game outcome, Figure 2 provides the probability that the referent team wins the second game of the series (i.e., Categories 1−4) for various levels of relative team quality, given the game is played at the referent team's home court, as is always the case in the NBA Finals for the second game of the series, and assuming the referent team won the first game of the series. For example, at the median value of relative team quality ($QUAL$ = 9.76, the dotted line in the figure), the referent team has a 71.6 percent chance of winning the second game. This increases to 88.1 percent if the referent team has three or more additional days before the series, and decreases to 46.4 percent if the opposing team has the additional time. Clearly, having extra time between winning the conference championship and the start of the NBA Finals can be quite beneficial.

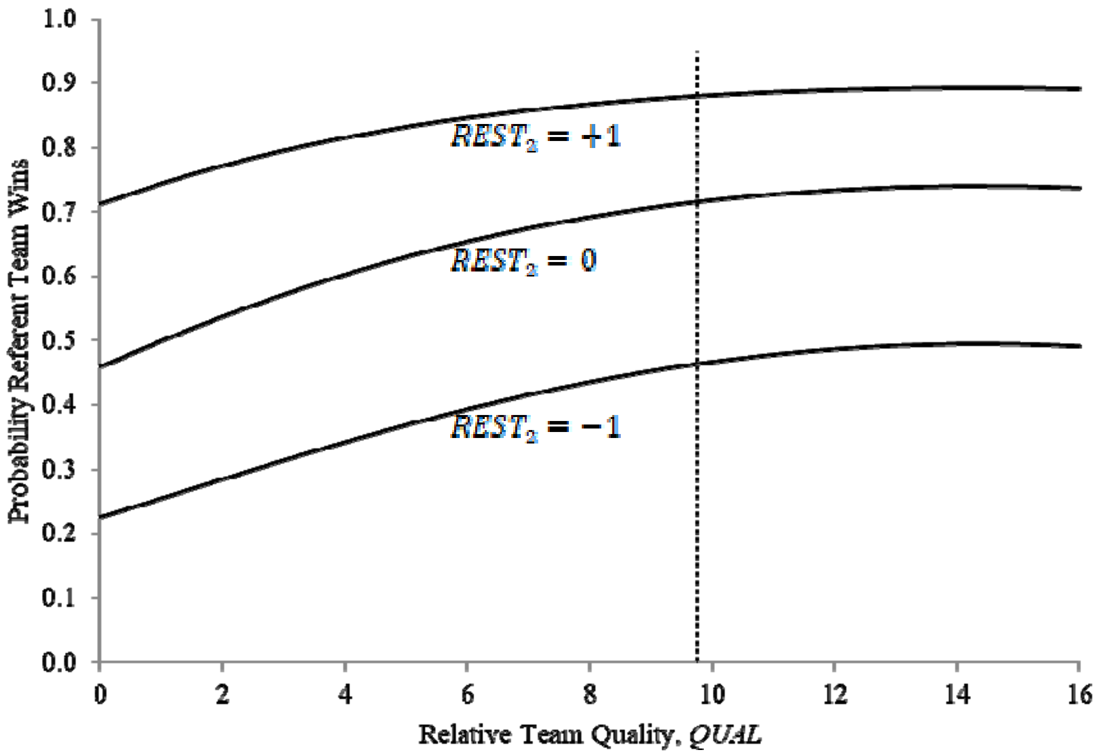

Figure 2. Predicted outcome for second game of series.

Discussion

As expected, Intercept4 is not statistically significant, since equally-rested, evenly-matched teams would be expected to have a 50/50 chance of winning the game (note, there are four categories for the referent team winning). Furthermore, the effects represented by the control variables are consistent with previous literature, with the exception that the back-to-the-wall effect when facing elimination is not statistically significant.

Of particular interest to our research are the values and significance of the $REST_j$ variables. And the most interesting and unexpected result is that $REST_2$ is statistically significant, but not $REST_1$. That is, additional rest appears to have a positive impact for a team, but the greatest effect is on the second game of the series, not the first. And the effect on the game outcome can be quite substantial, as the odds ratio for $REST_2$ is 2.90. Hence, getting an additional three or more days off between series than the opponent more than doubles the odds of winning the second game of the series.

Of course, the statistical analysis does not provide the reason why such a phenomenon might occur. In an analysis of regular-season Major League Baseball, Swartz (2009) observed that the home-field advantage is statistically greater for the middle game(s) of the series than for the first or last game. He suggests this may be due to a physical effect, "by the second game…the effect of staying in a hotel tends to wear on players" or a psychological effect, "…road teams can generate the adrenaline to overcome some of home-field advantage in the first game and last game of the series, but they lose their steam in between." In the NBA Finals, the first two games are played at the referent team's home court, then the series moves to the opposing team's arena; perhaps these physical and psychological issues are the reasons we detect a benefit of additional time between series, but only for the second game of the series.

Model Extensions

We now consider two extensions to our model, to provide additional confidence of our results.

Extending the Time Frame

We first consider extending the data from 1956, spanning 63 seasons and 359 games. As previously mentioned, this data would not be considered as "clean" as that used in the previous section, but can serve as a robustness check on those results.

Table 4. Parameter estimates for ordered logistic-regression model using 1956−2018 data.

Parameter	Estimate	Std Error	*p*-value
Intercept1	−2.94	0.343	<0.001
Intercept2	−1.91	0.321	<0.001
Intercept3	−1.15	0.311	0.001
Intercept4	−0.30	0.306	0.329
Intercept5	0.58	0.307	0.063
Intercept6	1.66	0.326	<0.001
$REST_1$	0.35	0.349	0.325
$REST_2$	0.68	0.351	0.053
$REST_3$	−0.13	0.351	0.717
$REST_{4+}$	−0.03	0.244	0.896
$QUAL$	0.09	0.053	0.093
$QLSQ$	−0.002	0.002	0.592
$MNTM$	−0.81	0.205	<0.001
$HOME$	0.51	0.098	<0.001
$EXPR$	0.54	0.213	0.014
$BACK$	0.34	0.243	0.156
$\hat{\sigma}_u^2$	0.49		0.157

The results of the model using data from 1956 through 2018 are provided in Table 4. The conclusions are similar to those using data from 1984 (Table 3), in that additional time between series is beneficial, but only for the second game of the series. Of the $REST_j$ variables, only the $REST_2$ variable is significant at the ten percent level (p-value = 0.053) with a coefficient of 0.68 (i.e., an odds ratio of 1.98). The estimated impact is slightly less than that using data since 1984 (note the coefficients for all of the $REST_j$ variables are smaller); still, a 98 percent increase in the odds of winning Game 2 is quite substantial.

Effect on Referent vs. Opposing Team

The definition of the $REST_j$ variables in the previous section assumes that the magnitude of the effect of additional rest is the same for the referent team as it is for the opposing team. In order to distinguish between the effect on the referent team—the home team for the first two games—and the opposing team, we replace the $REST_j$ variables with the following sets of variables:

$$RESTREF_j = \begin{cases} 1 & \text{if referent team had three or more additional days off} \\ 0 & \text{otherwise} \end{cases} \quad (5a)$$

$$RESTOPP_j = \begin{cases} 1 & \text{if opposing team had three or more additional days off} \\ 0 & \text{otherwise} \end{cases} \quad (5b)$$

where j = 1, 2, 3, and 4+ (4, 5, 6 or 7). While this is expected to be useful in determining whether the effect of time off differs between the two teams, the scarcity of the data becomes a concern, even for the extended timeframe. For example, while there have been sixteen instances since 1956 in which the referent team has won by at least 16 points ($MRGN = 1$) and the opposing team had three or more additional days off, this has never happened in a Game 1 of the Finals. Thus, we must be cautious in generalizing our results.

Table 5 provides the results of the analysis using both timeframes considered in the previous subsection. It appears that the greater advantage is with the referent team, as the only significant $RESTxxx_j$ variable for 1956−2018 is $RESTREF_2$, with a coefficient of 1.34 (p-value = 0.011). For the 1984−2018 timeframe, $RESTREF_2$ is significant at the five percent level (p-value = 0.014), and $RESTREF_1$ is significant at the ten percent level (p-value = 0.056). Having additional time off seems to primarily benefit the home (referent) team for the second game, again more than doubling the odds of winning game two. None of the $RESTOPP_j$ variables are significant, indicating additional time off does not significantly benefit, nor handicap, the away (opposing) team; note this is consistent with Hill (2017) who concluded that playing additional games earlier in the playoffs resulted in the home team being more likely to win a subsequent game, but had no effect on the away team. Again, though, the scarcity our data are a concern, particularly with the 1984−2018 timeframe; however, the results are consistent in that it is the second game in which the greatest effect is being realized and that the additional rest is beneficial, not detrimental.

Limitations

One limitation of this study is that the data are taken only from the NBA Finals. It is not clear that these results would carry over to the playoff series of other professional leagues. Nor can these results be extended to byes provided some teams in various sports; for example, the first two seeds in each conference of the National Football League get a bye week while the other playoff teams must play an additional game to advance.

Given the moderate statistical significance that was found, future research should certainly be focused on finding more conclusive results, particularly concerning whether the effect differs for referent and opposing teams. Also, research on the physiological or psychological reasons why additional rest may not significantly affect the first game of the series, but has more of an effect on the second game, would be of interest. Finally, an extension of this model to individual players would be worthwhile to evaluate the common practice of resting star players at the end of the season to prepare for the playoffs (Wade, 2013).

Table 5. Distinguishing effect on referent and opposing teams.

Timeframe:	**1984−2018**			**1956−2018**		
Parameter	**Estimate**	**Std Error**	***p*-value**	**Estimate**	**Std Error**	***p*-value**
Intercept1	−3.44	0.603	<0.001	−3.06	0.400	<0.001
Intercept2	−2.40	0.577	<0.001	−2.01	0.379	<0.001
Intercept3	−1.55	0.563	0.011	−1.24	0.370	0.002
Intercept4	−0.68	0.555	0.233	−0.39	0.365	0.290
Intercept5	0.07	0.554	0.895	0.50	0.366	0.180
Intercept6	0.97	0.564	0.097	1.58	0.381	<0.001
$RESTREF_1$	1.23	0.675	0.056	0.68	0.511	0.182
$RESTREF_2$	1.73	0.695	0.014	1.34	0.521	0.011
$RESTREF_3$	0.51	0.679	0.450	0.02	0.515	0.969
$RESTREF_{4+}$	0.30	0.528	0.576	−0.24	0.384	0.531
$RESTOPP_1$	0.42	0.841	0.615	0.04	0.574	0.946
$RESTOPP_2$	−0.19	0.840	0.821	0.23	0.574	0.685
$RESTOPP_3$	−0.14	0.843	0.871	0.29	0.575	0.610
$RESTOPP_{4+}$	−0.02	0.628	0.974	−0.19	0.417	0.650
QUAL	0.21	0.107	0.059	0.10	0.055	0.083
QLSQ	−0.01	0.005	0.135	−0.01	0.002	0.535
MNTM	−0.77	0.307	0.014	−1.01	0.231	<0.001
HOME	0.49	0.156	0.002	0.44	0.111	<0.001
EXPR	0.60	0.269	0.034	0.56	0.215	0.012
BACK	0.40	0.332	0.228	0.43	0.249	0.084
$\hat{\sigma}_u^2$	0.51		0.074	0.50		0.095

Conclusion

The rest vs. rust debate seems to arise whenever two teams come into a playoff series with a disproportionate amount of time from the previous series. Using data from the NBA Finals, this study has shown that additional time between series is beneficial, and that it provides more of an advantage in the second game of a series than it does for the first game. Although moderately significant, the effect is considerable, effectively doubling the odds of winning game two. Thus, a team that is experiencing a disproportionate amount of time from the previous series could utilize this information when deciding on how to schedule and intensify their practice sessions, by providing appropriate rest and maintaining rhythm to increase the likelihood of winning each game and, therefore, the series.

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