



# Rising Coaches Retreat 2019

## Analytic Myths

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# Roadmap of Myths

1 Get To The Boards? Or Get Back?

2 2-For-1's ... At All Costs?

3 Losing Late. 2's Or 3's?

4 T/F: Playoffs vs. Regular Season

5 What Stats Matter?

# Get To The Boards? Or Get Back?

*Who Wants No More Than 1 Crashing The Glass?*

*Who Wants 2 Or More Crashing The Glass?*

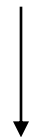
## Approach 1: Trade-Offs

Averages (NBA, 2018-19)

ORB%: **22.9%** | Trans. Rate Off Misses: **27.2%**

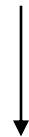
*For Every 1% Improvement In...*

ORB%



0.1076

TROM



0.1188

*The Team Improves By...*

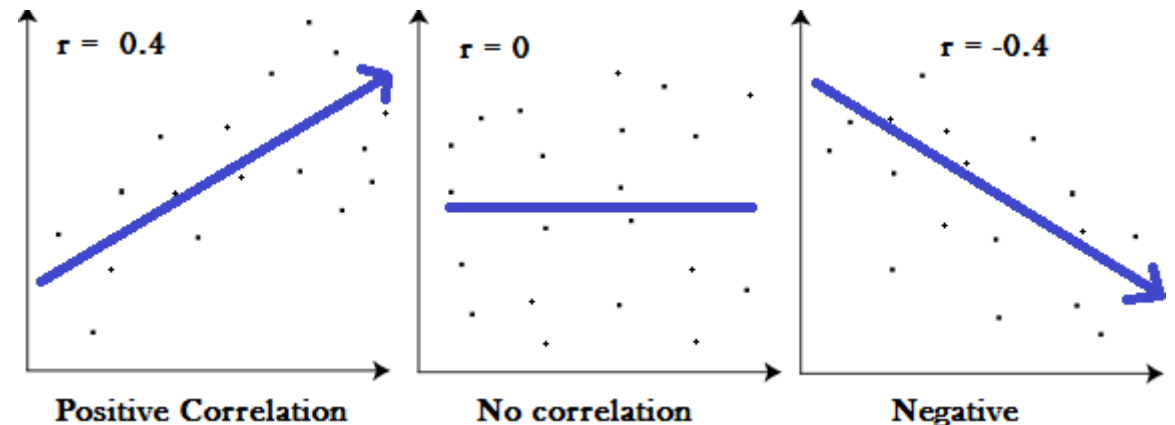
*Point Differential Per 100 Misses*

*With All Else Equal...*

ORB (CHI · DEN): 0.83%, 0.7 Wins

Trans. Rate Off Misses (MIN · CHI): 1.44%, 1.2 Wins

## Approach 2: Correlation



*Correlation Between...*

Crash Average AND ORB%: 0.66

Crash Average AND Trans. Rate Off Misses: -0.06

ORB% AND Trans. Rate Off Misses: -0.25

**OKC:** 3<sup>RD</sup> In ORB%, 7<sup>TH</sup> IN TROM; **WAS:** 25<sup>TH</sup> IN ORB%, 28<sup>TH</sup> IN TROM

# 2 For 1 ... At All Costs?

*Let's First Define A "Normal" 2-For-1 Opportunity... Do You Try It?*

55

TO

36

Conversion Rate

34.1%

Points Gained Average

+0.17

22

OF

30

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*Now Let's Define A "Quick" 2-For-1 Opportunity... Do You Try It?*

36

TO

30

Conversion Rate

20.1%

Points Gained Average

+0.41

24

OF

30

# Losing Late. 2's Or 3's?

*Receiving The Ball With 0:35 – 1:10 Remaining, & Shooting With 0:30 Or More Remaining ...*

<b>Down By 1</b>					<b>Down By 2</b>				
	<b>3</b>		<b>74.4</b>			<b>3</b>		<b>59.9</b>	
<i>If We Score</i>	<b>2</b>	<i>We Have A</i>	<b>57.7</b>	<i>Chance Of Winning</i>	<i>If We Score</i>	<b>2</b>	<i>We Have A</i>	<b>42.0</b>	<i>Chance Of Winning</i>
	<b>0</b>		<b>25.8</b>			<b>0</b>		<b>16.3</b>	
				<b>The #'s Say: 3's (4)</b>					<b>The #'s Say: Both (5)</b>
<b>Down By 3</b>					<b>Down By 4</b>				
	<b>3</b>		<b>47.3</b>			<b>3</b>		<b>26.0</b>	
<i>If We Score</i>	<b>2</b>	<i>We Have A</i>	<b>26.9</b>	<i>Chance Of Winning</i>	<i>If We Score</i>	<b>2</b>	<i>We Have A</i>	<b>12.9</b>	<i>Chance Of Winning</i>
	<b>0</b>		<b>6.6</b>			<b>0</b>		<b>3.4</b>	
				<b>The #'s Say: 3's (3)</b>					<b>The #'s Say: 3's (2)</b>
<b>Down By 5</b>					<b>Down By 6</b>				
	<b>3</b>		<b>10.8</b>			<b>3</b>		<b>8.0</b>	
<i>If We Score</i>	<b>2</b>	<i>We Have A</i>	<b>7.1</b>	<i>Chance Of Winning</i>	<i>If We Score</i>	<b>2</b>	<i>We Have A</i>	<b>2.1</b>	<i>Chance Of Winning</i>
	<b>0</b>		<b>1.2</b>			<b>0</b>		<b>0.6</b>	
				<b>The #'s Say: Both (6)</b>					<b>The #'s Say: 3's (1)</b>

# T/F: Playoffs vs. Regular Season

*For Each Of The Following, Answer "True" If You Think Winning The Stat Has Led To Higher Win% In The Playoffs vs. The Regular Season, And "False" If Otherwise...*

3-Point Attempts

**False!** Teams with more 3PA won 49% of games in the RS and have won 42% in the Playoffs.

3-Point Makes

**False!** Teams with more 3PM won 61% of games in the RS and have won 60% in the Playoffs.

3-Point Percentage

**True!** Teams with higher 3P% won 72% of games in the RS and have won 74% in the Playoffs.

Free Throw Attempts

**False!** Teams with more FTA won 55% of games in the RS and have won 50% in the Playoffs.

Free Throw Percentage

**True!** Teams with higher FT% won 56% of games in the RS and have won 67% in the Playoffs.

Fastbreak Points

**True!** Teams with more FB Pts won 56% of games in the RS and have won 60% in the Playoffs.

Fastbreak FGA Rate

**False!** Teams with higher FB Rate won 53% of games in the RS and have won 51% in the Playoffs.

ATO Expected PPP

**True!** Teams with higher ATO xPPP won 52% of games in the RS and have won 57% in the Playoffs.

# What Stats Matter?

*As A Group, Let's Come Up With A List Of 10 Stats We'd Want (Besides Height & Weight) To Describe A Player.  
Assume We Have Box Scores, Lineup Stats, And Shot Charts; No Video*

Mine:

1. Wingspan
2. Unassisted Rim FGA Rate
3. Dunks Per 100 Possessions
4. Stocks (STL + BLK) Per 100 Possessions
5. Usage%
6. True Shooting%
7. 3-Point FGA Rate
8. Assist / Turnover Ratio
9. On-Off DRB%
10. On-Off NRtg