

Analysis of Duke Field Hockey's 2022 Season

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Quick Methodology Overview

Thanks to the vast amounts of data collected over the course of the season, the analytics team was able to combine the data and extract aggregate trends.

Duke 2022 Data

In total, there are over 37504 recorded plays.

Circle Entry

Circle entry is an integral part of winning a Field Hockey game. Where does Duke enter the circle?

Where does Duke Enter the Circle?

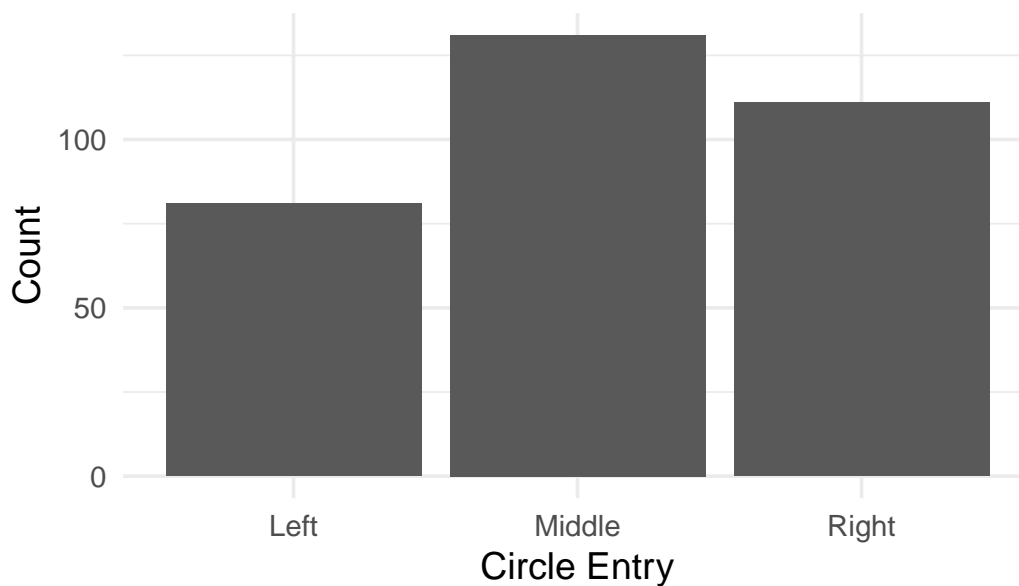


Table 1: Where Does Duke Enter the Circle?

Location	Frequency
Middle	131
Right	111
Left	81

What about our opponents?

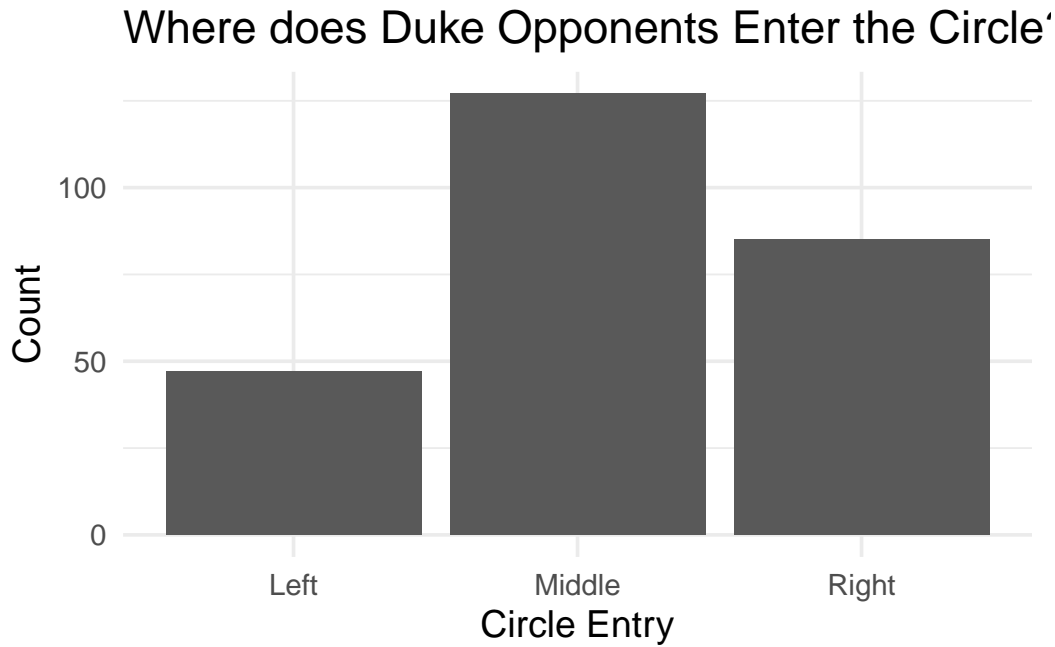


Table 2: Where Does Duke Opponents Enter the Circle?

Location	Frequency
Middle	127
Right	85
Left	47

The distribution is rather similar to Duke's own distribution. However, opponents do a **better** job forcing us to the left. Duke is forced to the left 25.08 percent of the time, while opponents are forced to the left 18.15 percent of the time. On a better note, Duke entered the circle 64 more times than their opponents across the season.

Table 3: Teams that Beat Duke in Circle Entry

BC	CUSE	NW	UMD	UNC	UofL	UVA
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Duke beat opponents in circle entries 10 out of 17 total games.

Outcomes

Circle Entry Outcomes

You can interpret the following numbers as: “The probability we do \mathbf{x} given we entered the circle from said location”. For instance for the first example you can say: Given we entered the circle from the middle, we shot the ball 45% of the time.

Table 4: How Often We Shoot When Entering The Circle

Location	Shooting Prob.
Middle	45.04
Left	29.63
Right	23.42

Table 5: How Often We Turnover the Ball When Entering The Circle

Location	Turnover Prob.
Right	54.95
Left	48.15
Middle	45.80

Table 6: How Often We Get Fouled When Entering The Circle

Location	Foul Prob.
Middle	19.85
Right	16.22
Left	9.88

Table 7: How Often We Have an ACE-0 When Entering The Circle

Location	ACE-0 Prob.
Right	56.76
Left	45.68
Middle	40.46

Table 8: How Often We Score When Entering The Circle

Location	Goal Prob.
Middle	8.40
Right	5.41
Left	4.94

Specific Turnover Data

The following table represents what type of turnover we commit when entering the circle.

Type of Turnover	Count
Foul Against	57
End Line	46
Interception	42
Duel Lost	36
Ball Out	5

Where do We Start and Win the Ball

The following table represents at which zone we get a Direct Ball Win. Naturally, we win the ball the most in the defensive zones while the least in the attacking zones.

Location of Direct Ball Win	Frequency
D25	1102
AMid	1052
DMid	907
A25	715

What Situations Lead to Goals Against?

This table shows the count of ACE goals vs. goals from Penalty Corners.

Goal Type	Frequency
ACE	21
PC	16