

Pass, Shoot, and Score: Measuring the Relationship between Winning and Offensive Efficiency through Passing and Shot Generation Statistics

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Methodology

- Only intentional passes are tracked
- Reduces the reward for fortunate plays that are more a result of luck rather than skill
- Passes by zone (DZ, NZ, OZ)
- Shot Attempts Generated by passes (SAG)
- Shots Generated by passes (SG)
- Offense created in transition (D/NZ) and in the offensive zone (OZ)

How Often and How Efficient

Player	ESM/ CC	ESM/ SI	SAGE
Forwards			
Jaromir Jagr	2:16	4:12	48.4%
Patrik Elias	2:36	4:50	47.6%
Steve Bernier	2:52	5:22	44.2%
Andrei Loktionov	2:48	6:04	46.2%
Fwd Average	3:19	6:17	44.9%
Defense			
Marek Zidlicky	4:12	8:30	48.9%
Eric Gelinas	3:56	8:33	51.2%
Def Average	4:53	11:31	43.0%

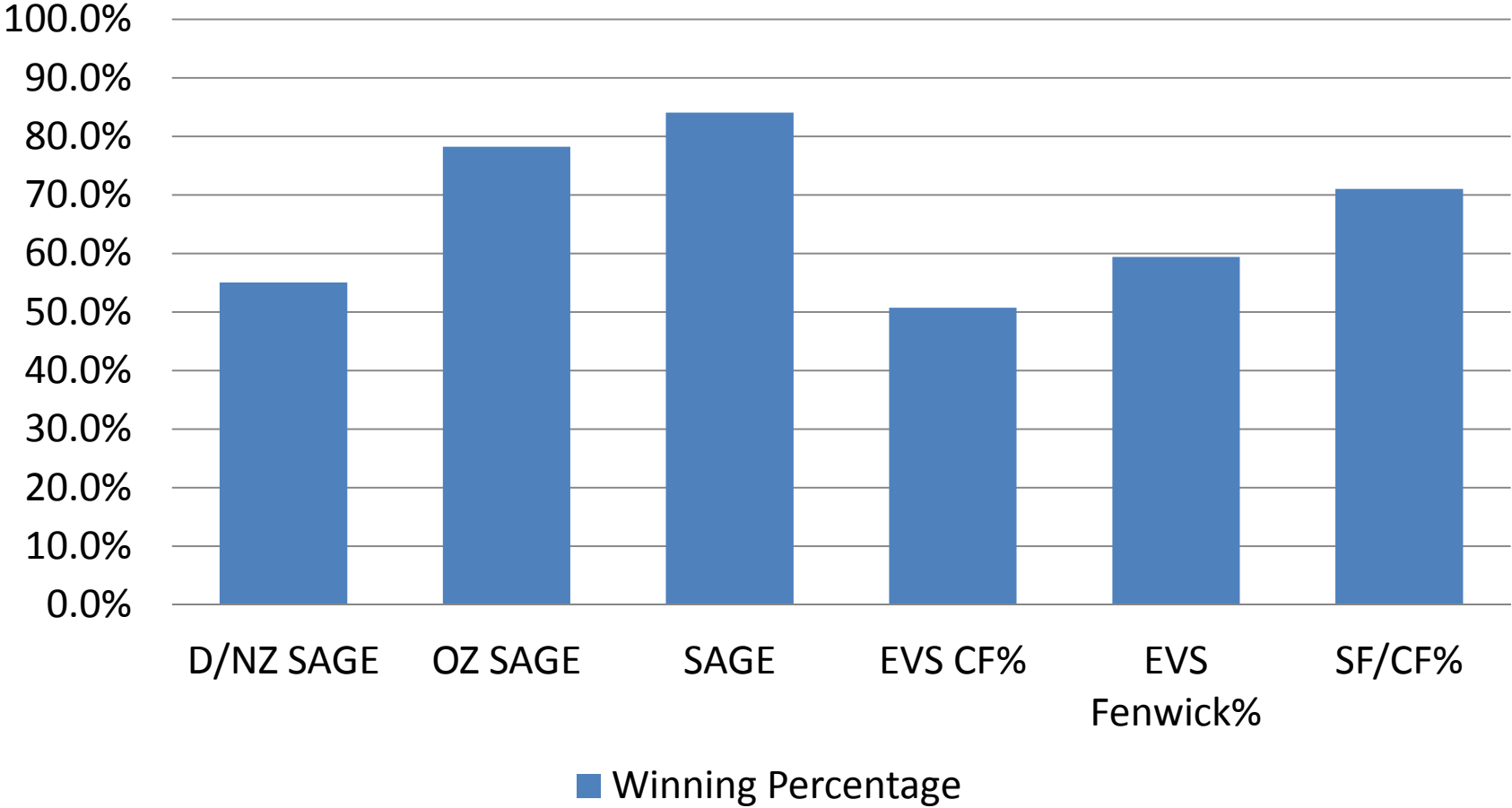
Passing and Shooting Efficiency

Player	SAG/Pass %	SH%G
Forwards		
Jaromir Jagr	16.3%	8.1%
Patrik Elias	17.8%	7.8%
Steve Bernier	24.1%	5.6%
Andrei Loktionov	20.7%	6.1%
Fwd Average	17.7%	7.3%
Defense		
Marek Zidlicky	9.8%	9.8%
Eric Gelinas	4.9%	7.4%
Def Average	7.5%	8.4%

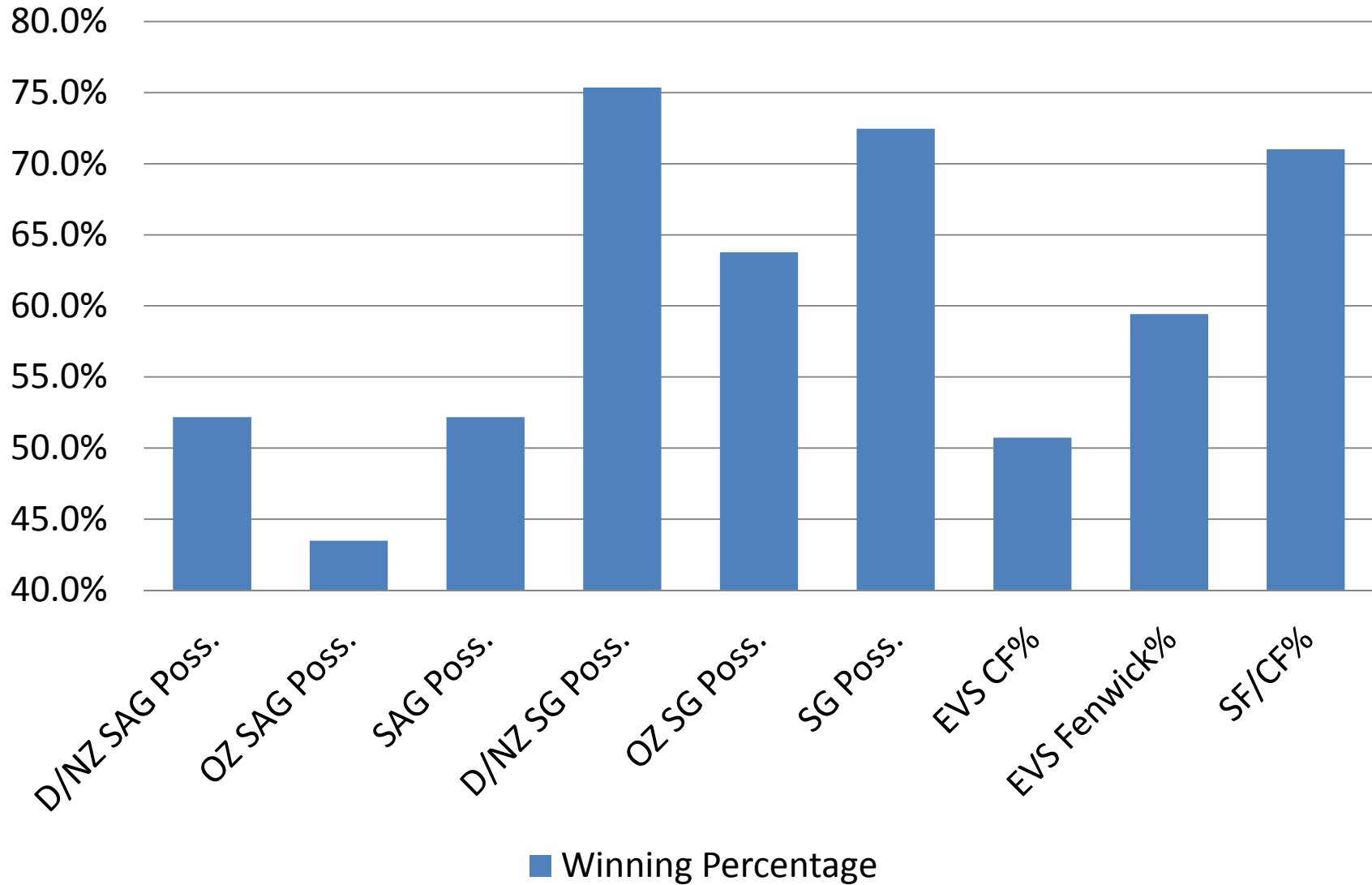
Generation Location

Player	Transition SAGE	Offensive Zone SAGE
Forwards		
Jaromir Jagr	30 / 66.7%	251 / 46.2%
Patrik Elias	36 / 44.4%	153 / 48.4%
Steve Bernier	40 / 37.5%	123 / 46.3%
Andrei Loktionov	20 / 35.0%	86 / 48.8%
Fwd Average	21 / 57.8%	98 / 42.6%
Defense		
Marek Zidlicky	35 / 82.9%	153 / 41.2%
Eric Gelinas	18 / 44.4%	32 / 59.4%
Def Average	18 / 56.4%	51 / 39.1%

Efficiency and Winning



Shot Generation and Winning



New for 2015

- Scoring Chances Generated: Passes made into the “house” that lead to attempts/shots/goals
- Potential Secondary Assists Generated: The penultimate pass preceding a shot attempt (Sustained Passing Plays)
- Close situations
- Linkup plays: How often are certain players combining in transition? On scoring chances?

Scoring Chance Data

Players	5v5 Per SC SAG	SC SAGE
Jaromir Jagr	18:56	87.5%
Ryane Clowe	16:29	55.6%
Patrick Kane	12:29	35.7%
Marcus Kruger	13:34	55.6%
Nick Bjugstad	17:25	33.3%
Jonathan Huberdeau	24:07	25.0%
Nikolai Kulemin	32:04	50.0%
John Tavares	34:32	80.0%

Sustained Passing Plays – A2 Data

Players	5v5 Per A2 SAG	A2 SAGE
Patrik Elias	10:31	38.5%
Martin Havlat	8:35	66.7%
Jeremy Morin	9:15	57.1%
Jonathan Toews	10:33	40.0%
Brad Boyes	12:20	33.3%
Aleksander Barkov	14:34	00.0%
Brock Nelson	10:15	50.0%
Nikolai Kulemin	14:15	33.3%

Close Situations

Players	5v5 Per SAG	SAGE	5v5 Per SAG Close	SAGE Close
Michael Ryder	9:36	50.0%	14:31	66.7%
Travis Zajac	4:53	59.4%	4:40	50.0%
Patrick Kane	3:39	50.0%	3:35	54.3%
Brad Richards	4:46	38.5%	4:44	33.3%
Dave Bolland	8:06	40.0%	27:38	00.0%
Jonathan Huberdeau	5:05	47.4%	4:40	46.7%
Ryane Strome	5:04	34.8%	5:57	41.7%
Mikael Grabovski	5:23	64.7%	4:49	58.3%

Corsi Contributions

Players	5v5 Per Corsi Contribution	5v5 Per Shot Involvement	Corsi Contribution Percentage
Mike Cammalleri	1:12	2:17	60.2%
Reid Boucher	1:05	2:21	59.2%
Patrick Sharp	1:10	2:10	37.7%
Andrew Shaw	1:44	4:05	38.5%
Nick Bjugstad	1:07	1:58	50.5%
Sean Bergenheim	1:07	2:06	51.2%
Kyle Okposo	1:16	2:21	44.9%
John Tavares	1:29	3:02	40.0%

New Jersey Linkup Play

	Zajac	Henrique	Zidlicky	Josefson	Severson	Clowe	Boucher	Jagr
Elias	1	1			1			
Zidlicky	1			1		1	1	1
Merrill		1	1				2	
Severson	1							
Clowe	1							
Ryder					1			
Boucher		2						
Larsson		1						
Gionta				2				

Shooting Percentage Generated

Team	5v5 Shooting Percentage (via Puckalytics.com 11/3)	5v5 Shooting Percentage Generated (Primary Passes)
New Jersey Devils (2013 – 2014)	7.1%	7.6%
New Jersey Devils (2014 – 2015)	8.6%	13.0%
Florida Panthers	4.1%	11.5%
New York Islanders	9.2%	15.3%
Chicago Blackhawks	4.4%	6.3%

What's Next?

- More volunteers will lead to more data and more concrete analysis
- Website in the works.
- When Player A passes to Player B, outcome is an attempt X%, shot Y%, and goal Z%
- rsti0713@yahoo.com @RK_Stimp if interested in volunteering

Data Used in this Presentation Tracked by the following

- Ryan Stimson
- Shane O'Donnell
- Ryan Stoll

Other Trackers

- Brian Franken
- Kevin Higgenbotham
- Brandon Dedrick
- Nick Biss