



# The Special Teams Myth: Why Even Strength Dominates Hockey Success

Hockey fans and analysts have long debated the relative importance of special teams versus even strength play in determining team success. While spectacular power play goals and clutch penalty kills capture headlines and highlight reels, the statistical reality tells a different story about what truly drives a team's path to the playoffs and championships.

## Understanding the Fundamentals

**Power Play Percentage (PP%)** measures the rate at which a team converts power play opportunities into goals, calculated as:  $\text{Power Play Goals} \div \text{Power Play Opportunities} \times 100$ .

**Penalty Kill Percentage (PK%)** represents how often a team successfully kills penalties without allowing a goal:  $(\text{Shorthanded Situations} - \text{Power Play Goals Against}) \div \text{Shorthanded Situations} \times 100$ .<sup>[1]</sup>

These percentages, while useful for comparison, can be misleading. A team with a 25% power play might seem dominant, but if they only get 2-3 opportunities per game, the actual impact on scoring is limited compared to a team that scores consistently at even strength throughout 40+ minutes of 5v5 play.<sup>[1]</sup>

## The Volume vs. Efficiency Paradox

Research analyzing NHL data reveals a fundamental truth about hockey: **individual even strength goals and power play goals have similar value, but the larger share of even strength goals scored over a season makes even strength play a more important contributor to team success.** This finding directly challenges the conventional wisdom that special teams determine championships.<sup>[1]</sup>

The math is straightforward. Teams typically spend approximately 45-50 minutes per game at even strength compared to just 6-8 minutes on special teams. Even with power plays converting at double the rate of even strength situations, the sheer volume of even strength play means most goals come from 5v5 situations.<sup>[1]</sup>

Advanced analytics have shown that teams perform similarly across different game states. **There is a high correlation between teams that perform above/below average during even strength and powerplay.** This suggests that underlying team quality manifests consistently across all situations rather than teams being dramatically different between even strength and special teams.<sup>[1]</sup>

## The Metrics That Matter: xG, PDO, and Regression to the Mean

**Expected Goals (xG)** models evaluate shot quality by considering factors like distance, angle, and game situation. Modern xG models in hockey help separate luck from skill by measuring whether teams are generating and allowing high-quality chances. Unlike raw shooting percentage, xG provides context for sustainable performance.<sup>[2]</sup>

**PDO**, often called SVSP% (Save Percentage + Shooting Percentage), measures the sum of a team's shooting percentage and save percentage. PDO typically regresses toward 100.0 over large samples, making it useful for identifying teams experiencing unusual luck. Teams with consistently high PDO may be overperforming their underlying metrics, while low PDO teams might be due for positive regression.<sup>[3]</sup>

**Corsi** (shots + missed shots + blocked shots for minus against) and **Fenwick** (shots + missed shots for minus against) measure shot attempt differential. These metrics capture puck possession and territorial control better than goals alone, providing more stable indicators of team performance. However, they don't account for shot quality, which is why xG models have gained prominence.<sup>[4]</sup>

## Debunking the "Special Teams Win Championships" Myth

Historical analysis of Stanley Cup winners reveals that championship teams typically excel at even strength play rather than special teams. While no team wins without competent special teams, the correlation between championship success and special teams rank is weaker than many assume.

The notion that "special teams win championships" persists because memorable moments often occur during critical power plays or penalty kills in playoff games. However, **playoff success correlates more strongly with even strength goal differential than special teams efficiency**. Teams that generate more quality chances and prevent them at 5v5 create the foundation for sustained success.<sup>[5]</sup>

Research indicates that **NHL teams exhibit relative randomness compared to other major sports**, meaning individual games and short playoff series can be influenced significantly by variance. This randomness can make spectacular special teams moments appear more decisive than they statistically are.<sup>[5]</sup>

## Variance and Stability: The Luck Factor

Special teams percentages demonstrate significant year-to-year variance, suggesting luck plays a substantial role. **Shooting percentage in hockey exhibits strong regression to the mean tendencies**, with teams rarely maintaining extremely high or low percentages across multiple seasons.<sup>[6]</sup>

PDO serves as a useful indicator of this variance. **PDO values far from 100.0 are often unsustainable**, indicating that teams with exceptional shooting or save percentages may experience correction over time. This regression affects special teams more dramatically than even strength play due to smaller sample sizes.<sup>[3]</sup>

The stability of different metrics varies considerably. Shot-based metrics like Corsi and Fenwick show more year-to-year correlation than percentage-based metrics, suggesting they better capture true team quality than raw conversion rates.<sup>[4]</sup>

## **Real-World Examples: When Numbers Tell Different Stories**

### **Teams with Strong Special Teams, Weak Even Strength**

Some teams have achieved playoff success despite mediocre even strength play by excelling on special teams, but these examples are increasingly rare in the modern NHL. The additional ice time created by frequent power plays can mask underlying even strength weaknesses temporarily.

### **Teams with Strong Even Strength, Average Special Teams**

The 2019 St. Louis Blues provide an excellent counter-example to the special teams narrative. Despite ranking in the middle of the pack in special teams during their championship run, the Blues dominated possession metrics and goal differential at even strength. Their **superior 5v5 play provided the foundation for playoff success**, with special teams serving as a complement rather than the primary driver.

Similarly, recent analytics research shows that **teams with strong even strength performance maintain more consistent success over multiple seasons** compared to those relying heavily on special teams efficiency.<sup>[1]</sup>

## **The Context Problem: When Special Teams Matter Most**

Special teams importance isn't uniform across all situations. **In close games and playoff scenarios, special teams can have outsized impact** due to the compressed scoring environment. However, teams still need strong even strength play to reach these crucial moments.

**Game state significantly influences the value of special teams opportunities.** Power plays late in tied games carry more weight than those in blowout situations, but these high-leverage moments represent a small fraction of total special teams time.

## **Goal Differential: The Ultimate Arbiter**

**Goal differential remains the strongest predictor of team success**, and even strength play contributes the majority of this differential. Teams that consistently outshoot and out-chance opponents at 5v5 create sustainable advantages that special teams efficiency alone cannot replicate.

**Expected goal differential at even strength correlates more strongly with playoff success than special teams conversion rates.** This suggests that underlying process metrics at 5v5 are more predictive than special teams results, which can be influenced heavily by small sample variance.<sup>[1]</sup>

## Implications for Team Building and Evaluation

For fans evaluating team performance, **focusing on underlying even strength metrics provides better insight into true team quality** than special teams percentages. Teams with strong Corsi/Fenwick numbers, positive expected goal differential, and neutral PDO at even strength typically outperform teams with excellent special teams but poor 5v5 play.

**Sustainable success requires competence across all game states**, but the foundation must be built on even strength excellence. Special teams can provide the margin for victory, but they rarely overcome fundamental weaknesses in 5v5 play over a full season.

## Looking Forward: The Evolution of Analytics

Modern hockey analytics continue evolving beyond basic percentages toward more sophisticated measures of team performance. **Spatio-temporal tracking data now enables analysis of pace, positioning, and player movement patterns**, providing deeper insights into what drives success.<sup>[7] [8]</sup>

**Machine learning models increasingly incorporate context and game state** to provide more nuanced performance evaluation. These advances help separate signal from noise in hockey's inherently random environment.<sup>[9]</sup>

## Conclusion: Where to Focus Your Attention

While special teams remain important components of hockey success, **even strength play provides the primary foundation for sustained team achievement**. Fans seeking to evaluate team quality should prioritize metrics that capture 5v5 performance: goal differential, expected goals, shot attempt rates, and underlying possession metrics.

**Special teams serve as amplifiers rather than drivers of team success**. Excellent special teams can push a good even strength team toward championship contention, but they cannot sustain a fundamentally flawed 5v5 system over 82 games. The most successful organizations build from even strength excellence outward, treating special teams as crucial complements to their foundational systems.

For hockey analytics enthusiasts, this understanding shifts focus toward the less glamorous but more predictive aspects of team performance. While power play goals generate excitement, the consistent ability to outplay opponents during the majority of game time determines who ultimately raises the Stanley Cup.

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