



*“Everyone is familiar with the basic measurement of a team’s success on the ice”*

## **ANALYTICS – BASIC STATISTICS INCLUDING PLUS/MINUS**

Normally, the league will publish the standings which will show the wins, losses, ties with Goals For and Goals Against and Team Points. They may also tabulate individual goals and assists and total points and power play goals and assists. If such tabulation is available, points per game by player is an informative calculation.

Even from this basic data coaches can see how the team is doing against its competitors and how individuals are doing. They can derive Goals For Averages(GFA), Goals Against Averages(GAA) and compare these results to other teams. They can compare the GFA minus the GAA to understand if it is a positive number. Almost all successful teams have a positive GFA – GAA for obvious reasons but coaches have to be careful only to start doing this after a significant number of games have been played and understanding if both teams have generally been playing the same number of games against over 500 winning % teams or the averages will be distorted.

Besides these very raw stats that have little diagnostic help other than we are not scoring enough goals or we are getting too many goals scored against us compared with our competition. The important question is why, and what aspect of play needs priority attention in practices, off ice sessions or video.

Another basic measurement that has been around for a long time is the 5 on 5 Individual Plus/Minus stat that has limited use, but still some. This stat gives a plus when a player is on the ice when we score and a minus when we are scored against. Each game has a talley Data Sheet a sample of which follows this Tip. The issues with using this stat are many but the extremes among players are generally still useful:

- Plus/minuses may vary depending on the skill sets of who plays with whom on a forward line, the five player unit, and particularly who the defensive pairings are
- Plus/Minuses may vary because of huge differences in ice time
- Plus/minuses may vary depending on who penalty kills as most teams count penalty kill pluses, but not minuses – some teams don’t count these but there is no harm in doing so as long as this fact is taken into account when coaches look at these stats
- Players changing on the fly when the other team is entering our zone can lead to a goal against us when the players just coming on the ice had no real chance to stop them from scoring but they were on the ice.



- Our goalie lets in a very soft goal on a bad bounce on a shot he saw all the way –why should all the players on the ice get a minus – same with spectacular saves when the players on the ice made a huge error to cause the great scoring chance
- Same if a defenceman falls or pinches at their blueline causing a breakaway goal
- If different players are in the lineup against different teams, with some opposition teams less talented than others, this can distort these stats

The theory is that the law of large numbers will eventually even out the above distortions but not necessarily so. Even so if Jimmy is a forward and is a season +20 and Johnny is another forward and is a season minus 10, the chances are that Jimmy is a better all around player than Johnny.

One way I like utilizing Plus/Minus is to only calculate the minuses so I can see the raw data of who's on the ice the most for goals against us, and calculate this only for games against teams who have an over 500 winning %. Again, the wide ranges of results among forwards and defencemen are instructive.

Here's the Individual Plus/Minus Form I use for each game. These per game results could be loaded into an Excel spreadsheet for ease of cumulative calculation. Bench coaches can easily record the plus and minus numbers and identify which are power plays (PP), which are penalty kills (PK), extra attacker goals (EA) and empty net goals (EN), 4 on 4 goals and so on.

**SEE BELOW**





