Analyzing the Performance of Quinn Hughes in the 2024-25 NHL Regular Season.

Nick Robison - IST 421

Story

Despite missing 14 games due to injury, Quinn Hughes still leads NHL defenseman in several categories and is one of the most impactful players in the NHL. My goal with this assignment is to show how exceptional Quinn Hughes is amongst NHL players.

Motivation

My motivation for this poster comes from my lifelong love of hockey. My favorite team is the Vancouver Canucks, and they have one of the best defensemen in the NHL and I wanted to see how good he was compared to other NHL players.

https://www.chathamdailynews.ca/sports/hockey/nhl/vancouver-canucks/canucks-quinn-hughes-norris-trophy-favourite

Did missing 14 games due to injury limit Quinn Hughes' eligibility for major NHL awards?
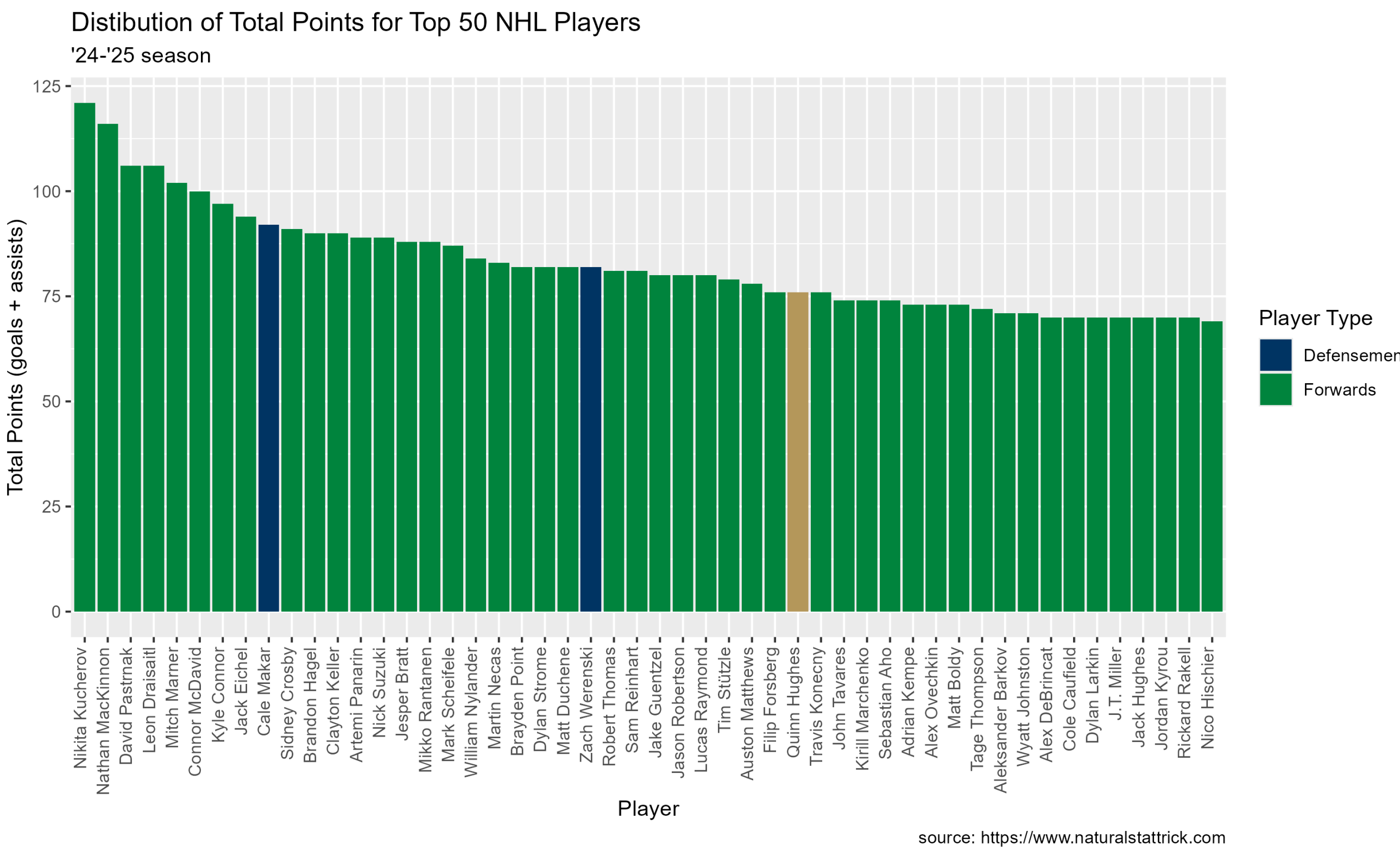

Figure 1. Despite missing 14 games Quinn Hughes still ranks among the top NHL players in total points production and is 3rd amongst defensemen. This shows that Quinn Hughes remains competitive for NHL awards but is unlikely to win them.
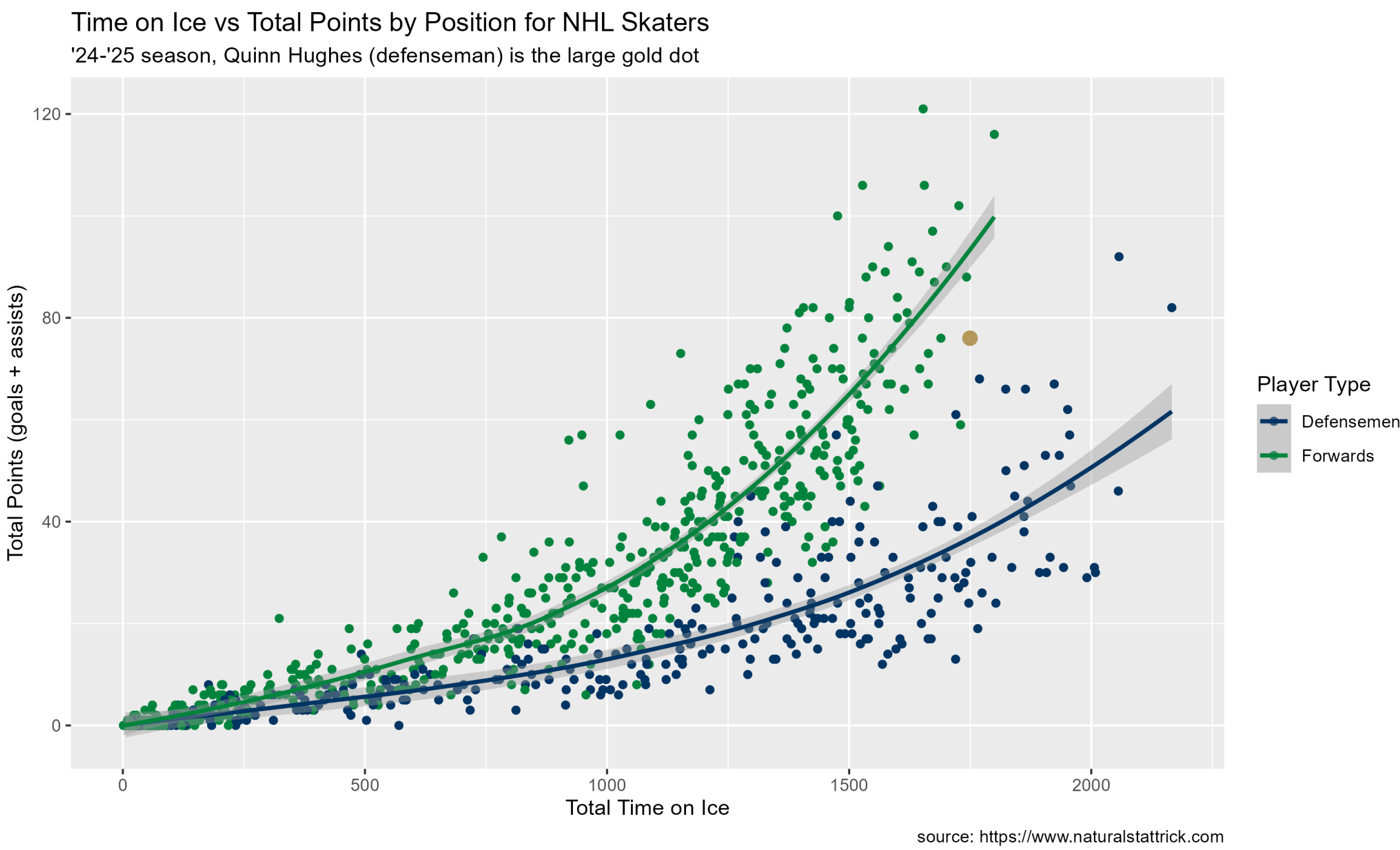

Figure 2. Quinn Hughes has significantly more points than expected for his time on ice and position which shows he was on pace to lead NHL defensemen in this important statistical category which would have propelled him into being a top contender for major NHL awards.
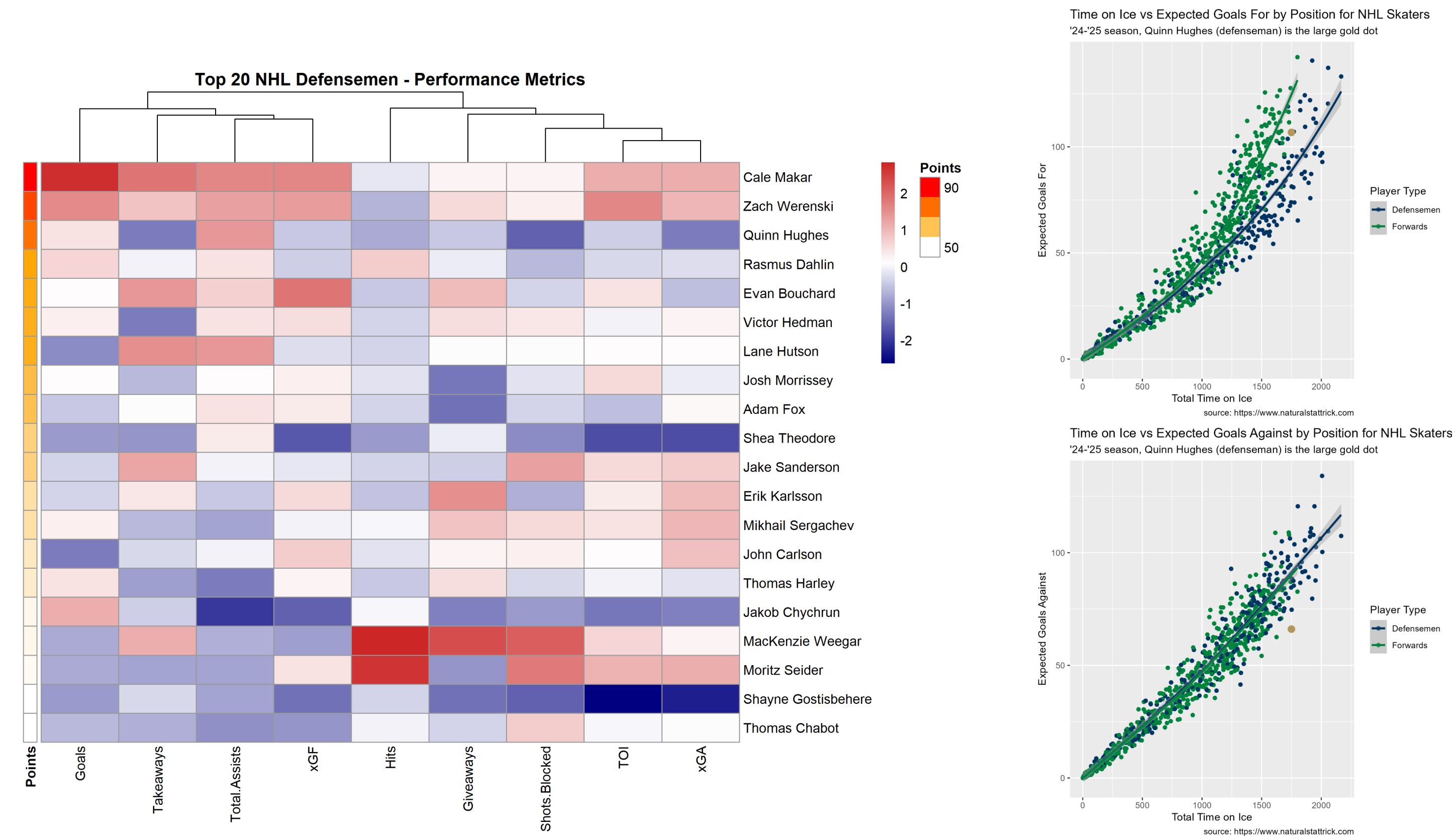
Supporting Evidence

Figure 3. Quinn Hughes is consistently performing better than average in most statistical categories for NHL defensemen. Scan the QR to see an animation of the top NHL defensemen point production over the regular season.

Data Description

This dataset is the individual player statistics for the NHL 2024-2025 season. This dataset is from naturalstattrick.com and includes statistics like goals, points, time on ice, penalties, position, shooting percentage, and many others. This data set had 920 rows (players) and 91 columns (statistical categories). I subsetted to a total of 8 key statistical categories. I used the following R packages in my analysis: Tidyverse, ggpubr, pheatmap, gganimate, and readxl.