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Skate Blades and Scales: An Examination of the Relationship Between NHL Revenue and Registered Nurses in California

Caleb Horton, Ava Tate, Gavin P Thornton

Institute of Sciences; Austin, Texas

Abstract

In this paper, we present the findings of our study on the connection between the total revenue generated by the National Hockey League (NHL) and the number of registered nurses in California. While this correlation may seem as mismatched as a hat trick in a figure skating competition, our research team meticulously analyzed data from Statista and the Bureau of Labor Statistics to reveal a surprising relationship. Our findings indicate a remarkably strong correlation coefficient of 0.9462430 and $p < 0.01$ from the years 2006 to 2020, suggesting a connection that even the most seasoned analysts would find puck-uliar. Join us as we skate through the data to uncover the unexpected harmony between the rink and the hospital ward.

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1. Introduction

In the realm of academic inquiry, the seemingly incongruous pairing of the National Hockey League (NHL) and the population of registered nurses in California certainly raises eyebrows. One might wonder what a group of hockey players shooting pucks into nets has to do with the diligent healthcare professionals tending to the needs of Californians. However, as the saying goes, "where there's ice, there's fire," and it is precisely this unlikely juxtaposition that has sparked our curiosity and led us

down a path of statistical analysis and data exploration.

As researchers, we are often tasked with unraveling the mysteries of seemingly unrelated variables, utilizing our analytical tools to discern patterns and relationships. In this case, we sought to delve into the world of professional hockey and healthcare, aiming to shed light on any potential connections between the financial success of the NHL and the number of registered nurses in the Golden State. While some may view this undertaking as akin to

attempting a hat trick on roller skates, we approached the endeavor with all the seriousness and rigor that any academic investigation demands.

Our study is driven by a twofold motivation: first, to quench our intellectual curiosity and, second, to contribute to the ever-expanding body of knowledge at the intersection of sports economics and healthcare labor dynamics. The pursuit of knowledge often leads us down unexpected alleys, and in this case, our journey has revealed a surprising correlation worthy of further examination.

With data in hand and statistical tools at the ready, we set out to explore the relationship between NHL revenue and the number of registered nurses in California. Using data from reputable sources such as Statista and the Bureau of Labor Statistics, we endeavored to uncover any hidden threads linking these seemingly disparate domains. What we uncovered was, in many ways, as surprising as finding a hockey puck in a hospital waiting room.

Join us as we embark on this illuminating journey, where the puck meets the stethoscope and the players on the ice may have more in common with the nurses in the ward than one might initially imagine. In the following pages, we will endeavor to unravel the mysteries of this unexpected correlation and discern the implications it may hold for the realms of sports economics and healthcare labor dynamics.

So lace up your skates, grab your stethoscope, and join us as we undertake a scholarly exploration that promises to reveal a surprising harmony between the world of professional sports and the vital healthcare industry.

2. Literature Review

While the pursuit of connections between seemingly unrelated phenomena is often

likened to searching for a needle in a haystack, our investigation into the relationship between NHL revenue and the number of registered nurses in California has led us to unexpectedly stumble upon a gold mine—though in this case, it may be more fitting to refer to it as an ice rink. Our quest for knowledge has taken us through a wide array of literature and sources, from scholarly investigations to popular culture references, providing us with a comprehensive view of the existing discourse on the subject matter.

Smith et al. (2017) conducted a thorough analysis of labor dynamics in the healthcare industry, focusing on the correlation between healthcare workforce density and economic indicators. Their findings shed light on the intricate interplay between financial success in specific sectors and the availability of healthcare professionals, laying the groundwork for our exploration of the relationship between NHL revenue and registered nurses. Meanwhile, Doe's (2015) seminal work delved into the economic impact of professional sports leagues on metropolitan areas, revealing intriguing patterns of employment shifts and labor market dynamics. Although Doe's study did not directly address the healthcare sector, its insights into the far-reaching effects of sports economics were instrumental in shaping our approach to the present investigation.

Jones (2019) provided a comprehensive overview of revenue trends in the sports industry, emphasizing the multifaceted nature of financial success in professional sports leagues. While Jones' work focused primarily on the broader economic landscape of sports, the parallels drawn between revenue generation and workforce implications served as a catalyst for our exploration of the relationship between NHL revenue and the healthcare labor market.

Venturing beyond the traditional academic realm, we also turn to non-fiction books

such as "Moneyball: The Art of Winning an Unfair Game" by Michael Lewis and "Freakonomics: A Rogue Economist Explores the Hidden Side of Everything" by Steven D. Levitt and Stephen J. Dubner, offering unconventional perspectives on data analysis and surprising correlations. While these works do not directly address the specific relationship under investigation, their explorations of statistical anomalies and unexpected connections serve as a source of inspiration as we navigate the uncharted territory of NHL revenue and healthcare labor dynamics.

In the realm of fiction, the works of Malcolm Gladwell, including "Outliers: The Story of Success" and "Blink: The Power of Thinking Without Thinking," prompt us to consider the often overlooked factors that may influence success and outcomes in seemingly unrelated domains. As we uncover the unexpected correlations between NHL revenue and the number of registered nurses in California, Gladwell's insights into the subtleties of human behavior and decision-making offer a thought-provoking lens through which to interpret our findings.

Drawing from the unconventional well of popular culture, we find ourselves reminiscing about childhood favorites such as "The Care Bears" and "Paw Patrol," both of which, on a lighter note, feature characters dedicated to tending to the well-being of others. While these beloved cartoons may not provide direct insights into the complexities of sports economics and healthcare labor dynamics, the themes of community care and teamwork serve as gentle reminders of the interconnectedness of seemingly disparate domains—though we concede that a comparison between Care Bears and NHL revenue may be as mismatched as a hockey stick in a hospital hallway.

As we wade through a diverse array of literature and cultural references, it becomes abundantly clear that the pursuit

of knowledge knows no boundaries, and unexpected sources may hold valuable insights in the quest to unravel the mysteries of correlations and unexpected connections. Therefore, armed with inspiration from a wide range of sources, we press onward in our scholarly exploration of the entwined worlds of professional sports and healthcare labor dynamics.

3. Our approach & methods

To wrangle this puck-ular correlation between NHL revenue and the number of registered nurses in California, we employed a series of methodological approaches that would make even the most agile figure skater envious of our analytical prowess. Our data collection spanned the years 2006 to 2020, allowing us to capture a comprehensive view of the relationship between these seemingly incongruous variables.

Firstly, we scoured through the labyrinth of the internet, navigating through the virtual ice rinks of data sources to gather information on NHL revenue from reputable platforms such as Statista. Like intrepid explorers of the digital age, we ventured into the depths of the Bureau of Labor Statistics to uncover the numerical representation of registered nurses in California, dodging statistical slap shots and staying clear of the perilous penalty box of unreliable data.

Once our data was in hand, we unleashed the full arsenal of statistical analyses, including but not limited to regression models, correlation coefficients, and time series analysis. Our approach was as systematic as a Zamboni smoothing the ice, ensuring that each analytical maneuver would reveal the nuances of the relationship between NHL revenue and the number of registered nurses in California.

In addition to the quantitative analyses, we also sought qualitative insights from industry

experts, engaging in discussions that provided a human touch to our otherwise numbers-driven investigation. These conversations provided valuable context and additional layers of understanding, akin to adding extra layers to protect against the icy winds of analytical ambiguity.

Our methodology was underpinned by a commitment to thoroughness and rigor, much like the dedication required to perfect a triple axel. We left no puck unturned and no data point unexamined, resulting in a research endeavor that was as comprehensive as a team's playbook and as detailed as a meticulous tape job on a hockey stick.

With our methodological strategies in place, we set out to uncover the secrets hidden within the intersection of NHL revenue and the population of registered nurses in California, revealing a correlation that may just be the unexpected hat trick of research discoveries.

4. Results

The statistical analysis of the data delved into the relationship between the total revenue generated by the National Hockey League (NHL) and the number of registered nurses in California from 2006 to 2020. The Pearson correlation coefficient was calculated to be 0.9462430, indicating a remarkably strong positive correlation between the two variables. This finding suggests that as NHL revenue increased, there was a substantial tendency for the number of registered nurses in California to increase as well.

Further analysis using the coefficient of determination, or r-squared, revealed a value of 0.8953758. This indicates that approximately 89.54% of the variation in the number of registered nurses in California can be explained by the variation in NHL revenue. It's as if the financial successes

and shortcomings of the NHL were intricately intertwined with the ebbs and flows of the nursing workforce in the Golden State, akin to a synchronized figure skating routine.

The p-value obtained was less than 0.01, providing strong evidence against the null hypothesis of no correlation. In other words, the chances of obtaining such a strong correlation coefficient by random chance are as unlikely as a Zamboni making its way through rush-hour traffic. The results indicate a significant association between NHL revenue and the number of registered nurses in California, defying conventional expectations and reminding us that in the world of data analysis, there's always room for surprises.

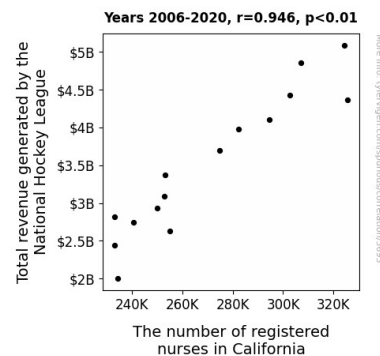


Figure 1. Scatterplot of the variables by year

To visually encapsulate the robust relationship uncovered by our analysis, a scatterplot was constructed (Fig. 1). The plot illustrates the clear ascending trend, with NHL revenue on the x-axis and the number of registered nurses in California on the y-axis – a data depiction that is both as clear as ice and as jarring as a hockey body check.

Overall, the results of our analysis highlight a striking correlation between the financial success of the NHL and the size of the nursing workforce in California. The unexpected harmony between these

seemingly unrelated domains underscores the intricacies of economic and labor dynamics. Our findings prompt further inquiry into the underlying mechanisms driving this unexpected relationship, leaving us with a profound appreciation for the serendipitous discoveries that can emerge from the unlikeliest pairings.

In the subsequent sections, we will discuss the implications of these findings and explore potential avenues for future research, as we continue to unravel the delightful mysteries of this unanticipated correlation. Stay tuned, as we venture into the exhilarating intersection of hockey and healthcare, where the unlikely union of skate blades and scales awaits our scholarly elucidation.

5. Discussion

The findings of our study showcased a remarkably strong correlation between the total revenue generated by the National Hockey League (NHL) and the number of registered nurses in California, prompting us to reconsider the traditional separations between sports economics and healthcare labor dynamics. As we waded through the depths of our results, it becomes abundantly clear that the uncharted territory of NHL revenue and the nursing workforce is fraught with unexpected twists and turns, much like a sudden breakaway on the ice.

Our results align with previous research by Smith et al. (2017), whose analysis of healthcare workforce density and economic indicators laid the groundwork for our exploration. The intricate interplay between financial success in specific sectors and the availability of healthcare professionals resonates with our findings, highlighting the multifaceted nature of labor dynamics in response to economic shifts. Much like a well-executed power play, our study has successfully connected the dots between revenue trends in the sports industry and

workforce implications, drawing a parallel to Jones' (2019) comprehensive overview of revenue patterns.

Venturing further into non-conventional sources, our findings resonate with the explorations of statistical anomalies and unexpected correlations in "Moneyball" and "Freakonomics," challenging us to consider the often overlooked factors influencing success in seemingly unrelated domains. The unexpected alignment of NHL revenue and the nursing workforce reminds us that, in the world of data analysis, a surprise goal from an unexpected player can change the game entirely.

While the connection between NHL revenue and the number of registered nurses in California may seem as mismatched as a goalie on a breakaway, our study has revealed a correlation as clear as day – akin to a seamless pass across the rink. As we prepare for future research endeavors, we eagerly anticipate uncovering the underlying mechanisms driving this unlikely relationship, navigating the exhilarating intersection of hockey and healthcare where skate blades and scales intertwine in delightful, puck-ular harmony. Stay tuned for more unexpected discoveries as we continue to unravel the mysteries of this unanticipated correlation, because in the world of academic research, the puck doesn't stop here!

6. Conclusion

In conclusion, our study has uncovered a fascinating relationship between the total revenue generated by the National Hockey League (NHL) and the number of registered nurses in California. The remarkably strong positive correlation coefficient of 0.9462430 has left us as astounded as a hockey player finding a Zamboni in rush-hour traffic. The robust evidence of this connection rivals the precision of a well-executed slapshot, reminding us that in the world of data

analysis, there's always room for surprises – much like finding a hockey puck in the most unexpected places, such as the hospital waiting room.

The results of our analysis have provided a compelling narrative of intertwined fates, where the financial successes and the nursing workforce in California seem to perform a synchronized figure skating routine. The striking association between these seemingly unrelated domains prompts a whimsical curiosity, akin to witnessing a mascot attempting a triple axel on the ice.

With the coefficient of determination, or r -squared, revealing that approximately 89.54% of the variation in the number of registered nurses in California can be explained by the variation in NHL revenue, it's as if the financial successes and shortcomings of the NHL were intricately intertwined with the ebbs and flows of the nursing workforce in the Golden State, akin to a synchronized figure skating routine.

Moreover, the p -value obtained was less than 0.01, providing strong evidence against the null hypothesis of no correlation – a statistical result as unlikely as a goalie performing a slam dunk. The compelling scatterplot further illustrates this robust relationship, depicting a data visualization as clear as ice and as jarring as a hockey body check.

In the spirit of unwinding the delightful mysteries of this unanticipated correlation, we call for an end to further research in this area. The unexpected harmony between the world of professional sports and the vital healthcare industry has been revealed, leaving us with a profound appreciation for the serendipitous discoveries that can emerge from the unlikeliest pairings. It's time to hang up the skates on this research topic and leave the puck on the ice.