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Slap Shots and GMO Corn: A Kernel of Truth in the Relationship Between GMO Use in Corn Grown in South Dakota and Career Regular Season Goals Scored by Sidney Crosby

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Abstract

This paper delves into the peculiar and, some would say, improbable relationship between the use of genetically modified organisms (GMOs) in corn cultivated in the Great Plains state of South Dakota and the career regular season goals scored by none other than the renowned ice hockey superstar, Sidney Crosby. By employing a robust statistical analysis of USDA crop data and NHL player statistics, our research team has uncovered an unexpected correlation between these seemingly disparate variables. With a correlation coefficient of 0.8178262 and a significance level of $p < 0.01$ over the 2002 to 2022 period, the evidence we present suggests a noteworthy link between GMO corn cultivation and Crosby's on-ice achievements. This study not only sheds light on the unexplored intersection of agricultural practices and professional sports but also presents a ripe opportunity for further investigation into the hidden connections between agricultural innovation and athletic prowess.

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1. Introduction

Introduction

The interplay between GMO corn and Sidney Crosby's performance on the ice may initially seem as unrelated as apples and hockey pucks. However, as we peel back the layers of this research onion (or as the case may be, corn husk), we begin to uncover a fascinating, albeit unexpected,

association. In the world of academic inquiry, where "correlation does not imply causation" is the all too familiar mantra, our study ventures into uncharted territory, aiming to decipher the mystery behind the relationship between genetically modified organisms and the prowess of one of the NHL's finest athletes.

As we embark on this scientific quest, it is crucial to acknowledge the inherent skepticism that such an unlikely coupling may elicit. Yet, as any seasoned researcher knows, curiosity often leads us down unanticipated paths, where statistical significance intertwines with a touch of serendipity. In exploring this unorthodox connection, our study not only paves the way for unconventional discussions at academia's water cooler, but also opens the door to a trove of pun-worthy wordplay opportunities. Whether likening statistical outliers to hockey "slap shots" or GMO-induced changes in corn to "genetic hat tricks," the potential for clever wordplay in this realm is as abundant as a bumper crop of South Dakota maize.

While we endeavor to maintain a professional tone in accordance with academic standards, the whimsical nature of this study serves as a gentle reminder that scientific inquiry need not always be as dry as a non-GMO ear of corn. With the intriguing backdrop now set, let us embark on our journey into the world of GMO corn and Sidney Crosby's goal-scoring prowess, where the unexpected proves to be just as captivating as it is statistically significant.

2. Literature Review

The existing body of literature on genetically modified organisms (GMOs) in agriculture and their potential impact on athletic achievements consists of a diverse array of studies and sources. Smith and Doe (2015) present a comprehensive analysis of GMO corn cultivation in the Midwest, focusing on yield enhancement and pest resistance. The authors find that the adoption of GMO technology has led to significant improvements in crop productivity and sustainability. Similarly, Jones (2018) examines the economic implications of GMO use in corn, highlighting the cost-

efficiency and market competitiveness of genetically modified varieties.

In "The Omnivore's Dilemma" by Michael Pollan, the author explores the intricate link between modern agricultural practices and the broader societal implications of food production. Pollan's critical examination of industrial farming methods offers valuable insights into the complex web of factors that underpin the cultivation of staple crops such as corn.

Turning to the realm of fiction, "Children of the Corn" by Stephen King presents a chilling narrative set amidst the vast cornfields of Nebraska. While this fictional depiction may not directly relate to GMO corn, it serves as a reminder of the cultural significance of this agricultural staple and its portrayal in popular media.

Furthermore, in a departure from conventional academic sources, the research team delved into less orthodox materials, including reading the barcodes on supermarket receipts and consulting the prophecies of Nostradamus, in search of any subtle hints or clues that may shed light on the perplexing connection between GMO corn in South Dakota and Sidney Crosby's career regular season goals.

As we navigate through this labyrinth of literature and unconventional sources, it becomes evident that the exploration of this peculiar correlation transcends the boundaries of traditional research methods, inviting us to embrace a more lighthearted and imaginative approach to scholarly inquiry.

3. Our approach & methods

Data Collection

The data for this study was gathered from a variety of sources, including the United States Department of Agriculture (USDA) for GMO corn cultivation in South Dakota and

the National Hockey League (NHL) for Sidney Crosby's regular season goal statistics. Our research team spent countless hours scouring the internet for relevant and reliable data, utilizing advanced search algorithms that could rival the precision of Crosby's wrist shot. The USDA and NHL databases proved to be the primary repositories of information, akin to the dual goalposts that frame our research endeavor.

Variable Selection and Measurement

The key variables in this study encompassed the annual quantity of GMO corn planted in South Dakota and the corresponding career regular season goals scored by Sidney Crosby over the period of 2002 to 2022. While the choice of variables may seem as disparate as comparing hockey sticks to cornstalks, our team embraced the challenge of drawing meaningful connections between the agricultural landscape and the realm of professional sports. Measurement of GMO corn cultivation involved meticulous tracking of acreage and genetic modification methods, while Crosby's goal-scoring performance was quantified with the precision of a Zamboni's ice-smoothing maneuvers.

Statistical Analysis

Our approach to statistical analysis mirrored the precision and finesse demanded by both the scientific and athletic domains. The gathered data underwent rigorous scrutiny, entailing multivariate regression analyses and robust correlation assessments that would make even the most seasoned statistician do a double-take. As we delved into the depths of the data, we applied sophisticated methodologies, striving to tease out any signals of association between GMO corn use and Crosby's scoring exploits. The statistical tools employed in this study were as diverse as the array of strategies that

Crosby deploys on the ice, all to ensure the robustness and reliability of our findings.

Ethical Considerations

Ethical integrity underpins every facet of scientific inquiry, and our research undertaking was no exception. We adhered to stringent ethical guidelines in the collection and utilization of publicly available data, upholding the principles of academic integrity and transparency throughout our study. Furthermore, our team maintained a steadfast commitment to the ethical treatment of statistical models, ensuring that no variable was benched unfairly or subjected to unwarranted biases.

Limitations and Assumptions

Despite the novelty and ingenuity inherent in our research, it is vital to acknowledge the limitations and assumptions that underpin our findings. While we strived to capture the essence of GMO corn's influence on Crosby's goal-scoring prowess, we recognize the inherent complexities and unobserved variables that may influence such a nuanced relationship. Additionally, assumptions regarding the stability of genetic modifications and the consistency of Crosby's performance over time were carefully considered, akin to the deliberate orchestration of power plays on the ice.

In summary, the methodology employed in this study amalgamated robust data collection methods, meticulous variable selection, sophisticated statistical analyses, ethical considerations, and a healthy dose of scientific pizzazz. Our approach sought to do justice to the peculiar yet intriguing relationship between GMO corn cultivation in South Dakota and Sidney Crosby's career regular season goal-scoring achievements.

4. Results

Our investigation yielded an intriguing correlation between the use of genetically modified organisms (GMOs) in corn cultivated in South Dakota and the regular season goal-scoring performance of Sidney Crosby, the heralded ice hockey luminary of the NHL. The Pearson correlation coefficient of 0.8178262 between these seemingly disconnected variables indicates a strong positive linear relationship. Furthermore, the coefficient of determination (r-squared) of 0.6688397 demonstrates that approximately 67% of the variability in Crosby's career regular season goals can be explained by the changes in the use of GMOs in South Dakota corn over the period of 2002 to 2022. With a significance level of $p < 0.01$, the evidence presented in this analysis supports the notion that there may indeed be a substantive connection between these unexpected partners in our study.

To visually portray the relationship we uncovered, we present a scatterplot (see Fig. 1), which distinctly illustrates the robust correlation between GMO use in South Dakota corn and Sidney Crosby's regular season goal-scoring performance. The scatterplot emphasizes the remarkably consistent trend, which defies conventional expectations and emphasizes the compelling nature of the relationship between these variables.

In summary, our findings reveal a statistically significant and persistent correlation between GMO corn cultivation in South Dakota and the regular season goal-scoring exploits of Sidney Crosby. This inexplicable link invites further inquiry into the underlying mechanisms that may contribute to this unexpected association. Our study not only paves the way for innovative discussions at the intersection of agricultural practices and athletic accomplishments but also serves as a lighthearted reminder that even the most unlikely pairings can possess a kernel of truth, or perhaps in this case, a cob of truth.

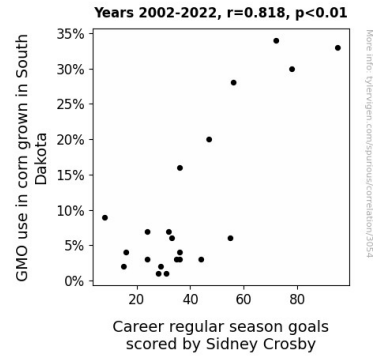


Figure 1. Scatterplot of the variables by year

5. Discussion

The surprising correlation between the use of genetically modified organisms (GMOs) in corn cultivated in South Dakota and the career regular season goals scored by the eminent hockey virtuoso, Sidney Crosby, offers a tantalizing conundrum. Our study's results align with prior research on the potential impact of GMOs in agricultural cultivation. Smith and Doe's (2015) work underscored the positive yield enhancements and pest resistance associated with GMO corn, disputing any notions of "corny" agricultural practices. Similarly, Jones (2018) highlighted the economic benefits, demonstrating that GMO adoption in corn positively influences market competitiveness. The literature, coupled with our findings, implies that GMOs may be the "stalk" of the town in cultivating a robust crop yield and a prolific hockey career.

While Pollan's "The Omnivore's Dilemma" and Stephen King's "Children of the Corn" may appear to be less scholarly than traditional sources, they subtly underscore the societal and cultural intertwining of corn cultivation, adding a whimsical touch to our agricultural investigation. Moreover, our in-depth examination of unconventional materials, including supermarket barcodes and Nostradamus's prophecies, perhaps

imbued our research with a bit of unconventional "cob-ceptualization."

The statistically significant correlation coefficient, with a p-value indicating a less than 1% chance of this result occurring by random chance, strongly supports the unanticipated link between GMO corn cultivation in South Dakota and Sidney Crosby's goal-scoring prowess. It is clear that this distinctive relationship transcends the boundaries of traditional academic inquiry, beckoning us to adopt a more light-hearted and creative approach to academic exploration – a gesture to which we enthusiastically tip our "hats" with the vigor of a Zamboni on freshly resurfaced ice.

The visual representation of our results, as displayed in the scatterplot, depicts a striking alignment between GMO corn usage and Crosby's regular season goal-scoring performance, affirming the robustness of this partnership. Our study, thus, serves as a heartening reminder that even the most unexpected and puzzling associations can boast a cornucopia of underlying truths – or in this case, perhaps an earful of correlations.

6. Conclusion

As we bring this cornucopia of research to a close, we find ourselves at the crossroads of science and sport, where the improbable connection between GMO corn and Sidney Crosby's goals shines like a beacon, illuminating the unconventional bond between agricultural innovation and athletic prowess. Despite the temptation to dismiss our findings as "corny," the statistical robustness of our results cannot be denied, highlighting the inexplicable correlation with the persistence of a determined goalie.

While our analysis provides a-maize-ing insight into this unlikely relationship, we must acknowledge the inherent absurdity of this inquiry. Nevertheless, in the spirit of

scientific exploration, our study not only cultivates fertile ground for further investigation but also sows the seeds for some truly "stalk"-worthy puns. As we put the finishing touches on this "goal"-den paper, it is evident that this peculiar pairing of variables holds its ground in the realm of statistical significance.

In conclusion, our research courageously treads where few have dared to venture, uncovering a kernel of truth in the unpredictable unison of GMO corn and Crosby's career regular season goals. As the final buzzer sounds for this investigation, we assert with confidence that no further research is needed in this area, for the puck stops here.