# Mad for Madyson: A Goally Good Connection Between Name Popularity and Field Hockey Victories in NCAA Div II Finals

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#### Abstract

This research paper presents a statistically sound investigation into the relationship between the popularity of the first name "Madyson" and the number of goals scored by the winners in NCAA Field Hockey Div II finals. Utilizing data from the US Social Security Administration and NCAA, our research team employed rigorous statistical analysis to unravel this seemingly whimsical correlation. Surprisingly, our findings revealed a correlation coefficient of 0.6389073 and a significant pvalue of less than 0.01 for the years 1985 to 2022. While this connection may appear as elusive as a penalty corner goal, our study sheds light on the peculiar but intriguing relationship between nomenclature trends and athletic success. Our work not only advances the field of sports analytics but also inspires contemplation on the mystique of nomenclature and its potential impact on sports achievements.

### 1. Introduction

In the world of sports analytics, researchers have delved into a myriad of factors that may influence athletic performance and success. From nutrition and physical conditioning to psychological factors and strategic game plans, the quest to unravel the predictors of victory has been as persistent as the pursuit of the perfect penalty stroke. Amidst this diverse landscape of potential influencers, one might not immediately expect to find a quirky and seemingly whimsical factor such as the popularity of a particular first name. However, as the old adage goes, "there's more than meets the eye," and our study delves into the curious relationship between the prevalence of the first name "Madyson" and the number of goals scored by the triumphant teams in NCAA Field Hockey Division II finals.

As researchers, we are often drawn to the unexpected and the unconventional, seeking to uncover hidden connections and unearth correlations that may at first appear as elusive as a game-winning goal. The intersection of nomenclature trends and athletic achievements may, at first glance, seem like an unlikely terrain for statistical exploration. Yet, as we delve into the data drawn from the US Social Security Administration and the NCAA. а compelling and significant association emerges, akin to an unexpected breakaway on the field. While the initial impulse might be to dismiss this correlation as pure coincidence, our rigorous statistical analyses provide compelling evidence to suggest otherwise.

Our study aims not only to present empirical evidence of this curious connection but also to provoke contemplation on the role of seemingly trivial or inexplicable elements in the realm of sports triumph. Through our meticulous data analysis, we seek to shed light on the intersection of nomenclature trends and athletic success, prompting further inquiry into the nuances of sports performance predictors. Moreover, this investigation contributes to the broader discourse on the influence of unconventional factors in the realm of analytics, emphasizing the need to consider diverse and unexpected variables in the pursuit of understanding athletic achievements.

As we embark on this statistical journey, we invite our readers to join us in unraveling the captivating relationship between a name and the elusive pursuit of victory in the realm of NCAA Field Hockey Division II finals. Just as a game of field hockey unfolds with unexpected twists and turns, our exploration of this peculiar correlation promises to offer both statistical insights and a touch of whimsy, reinforcing the notion that in the domain of sports analytics, surprises abound like unexpected penalty shootouts.

#### 2. Literature Review

To contextualize the exploration of the unconventional and seemingly whimsical correlation between the prevalence of the first name "Madyson" and the number of goals scored by victors in NCAA Field Hockey Div II finals, it is imperative to survey the existing literature on nomenclature trends and their potential impact on athletic success.

Smith and Doe (2015) undertook an extensive analysis of the social and psychological popularity, ramifications of name revealing intriguing sociocultural implications that may permeate into seemingly unrelated domains such as athletic competitions. Jones et al. (2018) further substantiated these findings by delving into the subconscious biases associated with particular names, shedding light on the potential psychological facets that could, albeit inadvertently, influence sports performance.

Turning our attention to more niche publications, "The Book of Names: Their Meanings, Origins, and Impact on Victorious Outcomes" by Johnson (2007) offers a comprehensive exploration of the historical significance and hidden connotations of names, clandestine hinting at the influence that nomenclature preferences may exert on various spheres, including athletic triumphs. In a similar vein, "The Power of Nomenclature: Unraveling the Mysteries of Title and Triumph" by Anderson (2013) delves into the esoteric intricacies of names and their purported impact on domains hitherto unexplored. including sports victories.

As we venture into a realm where statistical inquiry converges with whimsy and unanticipated connections, it is pertinent to acknowledge the potential sources of inspiration that may underpin this investigation. Drawing analogies from sources that may not appear prima facie relevant but harbor subtle correlations, the fictional works of "The Name Game: A Tale of Sporting Serendipity" by Roberts (1999) and "The Goal-Scoring Alphabet: A Novel Exploration of Nomenclature and Victory" by Davis (2011) provoke contemplation on the interplay between nomenclature and sporting achievements.

Moreover, in the spirit of uncovering unexpected parallels and connections, it behooves us to draw inspiration from unconventional sources. Board games such as "Name Quest: The Pursuit of Athletic Achievement" and "Goal Galore: A Game of Nomenclature and Victorious Pursuits" serve as whimsical proxies for the intricate web of associations we aim to disentangle, offering a lighthearted yet thought-provoking lens through which to view ostensibly incongruous relationships.

The divergent array of literature and sources referenced above sets the stage for our statistical expedition into the enigmatic realm of name popularity and its curious connection to the number of goals scored by triumphant teams in NCAA Field Hockey Div II finals. As we embark on this scholarly escapade, it is essential to maintain a discerning outlook while embracing the unexpected junctures and hidden revelations that may surface amidst our analytical odyssey.

# 3. Methodology

In order to investigate the potential relationship between the popularity of the first name "Madyson" and the number of goals scored by the winning teams in NCAA Field Hockey Div II finals, our research team undertook a meticulous and rigorous approach to data collection and statistical analysis. The data utilized in this study were obtained from the US Social Security Administration, providing comprehensive information on the popularity of the name "Madyson" from 1985 to 2022. Additionally, data on the number of goals scored by the winning teams in NCAA Field Hockey Division II finals were collected from official NCAA records, ensuring the accuracy and reliability of the sporting outcomes analyzed.

To commence our analysis, the first step involved the meticulous extraction of the frequency of the first name "Madyson" from the vast dataset provided by the US Social Security Administration. While one might envision our research team delving into a sea of names to uncover the elusive "Madyson," rest assured that our approach was as precise as a perfectly executed drag flick. A carefully crafted algorithm was employed to sift through the multitude of names, ensuring that "Madyson" was accurately isolated for further examination. Once the data on the prevalence of "Madyson" was secured, it was meticulously organized and prepared for integration into the broader statistical analysis.

Simultaneously, the data pertaining to the number of goals scored by the victorious teams in NCAA Field Hockey Division II finals were compiled, corroborated, and cross-verified to ensure their consistency and accuracy. This careful curation of sporting outcomes was reminiscent of a strategic huddle, with our research team leaving no stone unturned in selecting and verifying the relevant statistical indicators.

Upon the compilation of the requisite datasets, the next phase of our methodology entailed the application of advanced statistical techniques to explore the potential relationship between the prevalence of the name "Madyson" and the performance of the winning teams in NCAA Field Hockey Division II finals. Through a series of robust analyses, including correlation coefficients and regression models, we meticulously examined the patterns and associations between these seemingly disparate variables. This analytical approach sought to unearth any underlying connections, much like a skilled forward aims to find the back of the net with precision and finesse. Furthermore, to ensure the reliability and validity of our findings, we conducted sensitivity analyses and robustness checks, fortifying the statistical integrity of our results.

Our statistical journey through the data was akin to navigating a complex penalty shootout, as we diligently worked to decipher any potential signals amidst the noise of seemingly unrelated variables. We aimed to quench any skepticism by meticulously scrutinizing our results, acknowledging that the correlation between nomenclature and athletic success may raise eyebrows, much like a contentious call on the field.

In summary, our research methodology encompassed a comprehensive and meticulous approach to data collection, curation, and statistical analysis. By employing rigorous statistical techniques and maintaining a keen eye for detail, we endeavored to navigate the intriguing relationship between the popularity of the name "Madyson" and the attainment of victory in NCAA Field Hockey Division II finals, ultimately providing a statistically sound and compelling analysis of this unexpected correlation.

# 4. Results

Upon conducting our statistical analysis, we found a notable correlation between the popularity of the first name "Madyson" and the number of goals scored by the winning teams in NCAA Field Hockey Div II finals. The correlation coefficient was calculated to be 0.6389073, with an r-squared value of 0.4082025, and a p-value less than 0.01. These results suggest a moderate to strong positive relationship between the prevalence of the name "Madyson" and the success of the field hockey teams in scoring goals in the NCAA Division II finals.

In our exploration of this unorthodox relationship, we drew upon data spanning from 1985 to 2022, incorporating information from the US Social Security Administration and NCAA records. The comprehensive analysis of this multi-decadal dataset revealed a surprising and robust association, demonstrating that the popularity of the name "Madyson" appears to be linked with the goalscoring prowess of the triumphant teams in the NCAA Field Hockey Div II finals.

Figure 1 presents our scatterplot, visually representing the strong correlation we uncovered. The scatterplot depicts the striking alignment of the prevalence of the name "Madyson" and the number of goals scored by the victorious teams, offering a compelling visual representation of this unexpected but intriguing relationship.



**Figure 1.** Scatterplot of the variables by year

Our findings not only contribute to the unconventional terrain of sports analytics but also allude to the whimsical and often perplexing nature of statistical exploration. While the link between a name and athletic success may appear as incongruous as a player attempting a reverse stick shot with excessive spin, our research underscores the potential impact of seemingly arcane variables on sports achievements. Furthermore, our study invites contemplation on the often overlooked influences in the domain of sports analytics, emphasizing the need for statistical inquiry into unanticipated elements that may underpin athletic triumphs.

In summary, our statistical investigation unearths a peculiar yet compelling connection between the popularity of the first name "Madyson" and the number of goals scored by the winners in NCAA Field Hockey Div II finals. This exploration champions the spirit of statistical inquiry, embracing the unexpected and prompting reflection on the intricacies of nomenclature trends in the realm of athletic accomplishments.

#### 5. Discussion

The pursuit of knowledge often leads us to unexpected places, and our exploration into the connection between the prevalence of the first name "Madyson" and the number of goals scored by triumphant teams in NCAA Field Hockey Div II finals certainly exemplifies this sentiment. Our findings revealed a striking correlation between these seemingly disparate variables, with а correlation coefficient of 0.6389073 and а significant p-value of less than 0.01. This robust statistical relationship suggests that the popularity of the name "Madyson" is associated with the goalscoring prowess of the victorious teams. These results not only emphasize the potential impact of nomenclature trends on athletic achievements but also underscore the whimsical and often surprising nature of statistical inquiry.

Our investigation builds upon prior research that has hinted at the societal and psychological implications of name popularity. While some may initially dismiss the idea of a bizarre connection between a first name and sports success, we cannot ignore the subtle but meaningful influences that nomenclature trends may exert. Smith and Doe's (2015) work on the social and psychological ramifications of name popularity serves as a thought-provoking backdrop to our findings, prompting us to delve deeper into realm of unconventional correlations. the Additionally, the esoteric exploration by Johnson (2007) into the historical significance and hidden connotations of names offers a compelling lens through which to view our results. Although it may sound far-fetched, the seemingly whimsical premise of our study is fortified by the robust statistical evidence unveiled in our analysis, echoing the sentiment that truth can indeed be stranger than fiction.

Furthermore, our research aligns with the lighthearted yet thought-provoking analogies drawn from unconventional sources in the literature review. Just as "The Goal-Scoring Alphabet" by Davis (2011) offered a novel perspective on nomenclature and success, our study demonstrates how seemingly

unrelated variables may intertwine in unexpected ways. As we navigate the juncture where whimsy converges with statistical inquiry, our findings not only advance the field of sports analytics but also challenge preconceived notions about the potential influences on athletic triumphs. Our statistical expedition into this uncharted terrain exemplifies the essence of scholarly exploration, beckoning us to contemplate the intricate and often unanticipated connections that underpin our world.

In closing, our study signifies a playful yet meaningful venture into the enigmatic realm of name popularity and its curious association with the number of goals scored by victorious teams in NCAA Field Hockey Div II finals. We encourage further inquiry into other seemingly improbable correlations, as we continue to unravel the underlying intricacies of our world, one statistical analysis at a time.

## 6. Conclusion

In conclusion, our study illuminates the unexpected convergence of nomenclature trends and athletic achievement, as evidenced by the striking correlation between the prevalence of the first name "Madyson" and the goal-scoring prowess of victorious teams in NCAA Field Hockey Division II finals. Our findings not only underscore the influence of seemingly whimsical variables on sports performance but also beckon further exploration of unconventional factors in the domain of sports analytics.

The robust correlation coefficient of 0.6389073 and the significant p-value of less than 0.01, while initially reminiscent of an improbable deflection goal, convincingly delineate the relationship between the popularity of the name "Madyson" and the number of goals scored by triumphant field hockey teams. This unexpected connection, reminiscent of an underdog team's meteoric rise in a championship tournament, challenges traditional notions of sports performance predictors and invites contemplation on the nuanced interplay of diverse influences.

While our study may elicit bemusement akin to a surprising shootout victory, it emphasizes the need to

broaden the horizons of sports analytics, embracing unanticipated variables with the enthusiasm of a rookie player scoring their first collegiate goal. We urge further investigation into the impact of unconventional elements on athletic success, recognizing that statistical inquiry should encompass the quirks and curiosities that color the fabric of sports achievements.

In light of these revelatory findings, we assert that no further research is paramount in this curious area of study. Our work not only enriches the landscape of sports analytics but also imparts a touch of whimsy to the staid domain of statistical exploration. Just as a well-executed penalty stroke captivates spectators with its unexpected finesse, our research highlights the inherent intrigue of unorthodox correlations and the potential for unconventional factors to shape athletic triumphs.

It's time to blow the final whistle on this quirky investigation, savoring the statistical victory it represents and acknowledging the enduring resonance of the seemingly improbable. As we bid adieu to this peculiar exploration, we invoke the spirit of statistical inquiry to continue unraveling the enigmatic tapestry of sports achievements, embracing the idiosyncrasies that infuse this domain with a dash of unpredictability and mirth.

In summary, our research stands as a testament to the captivating interplay of the mundane and the extraordinary, proving that within the realm of statistics, as in the world of sports, the allure of the unexpected never fails to score.

No further research is needed in this area.