

# Hitting Home Runs and Falcons' Runs: A Playful Examination of the Correlation between Matt Kemp's Bats and Atlanta's Stats

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This paper explores the potentially whimsical relationship between the number of home runs hit by Matt Kemp and the season wins for the Atlanta Falcons. While the connection may seem as improbable as a knuckleball in a game of cricket, we employed rigorous statistical analysis, utilizing data from Baseball Reference and Pro-Football-Reference.com, to investigate this seemingly far-fetched correlation. Our research team discovered a correlation coefficient of 0.6535663 and  $p < 0.01$  for the years 2006 to 2020. Our findings may add a dash of humorous uncertainty to the world of sports analytics and encourage further exploration of unexpected connections in the world of athletic achievement.

In the realm of sports statistics, where numbers hold sway and correlations are sought after like the Holy Grail, unconventional connections can pique the interest of inquisitive minds. As researchers delve into the labyrinthine world of athletic data, they often uncover curious relationships that may seem as perplexing as a left-handed batter trying to hit a knuckleball. In this paper, we unveil a seemingly whimsical connection between the number of home runs hit by baseball player Matt Kemp and the season wins for the Atlanta Falcons, two entirely distinct realms of athletic prowess that have collided in a rather unexpected manner.

The idea that thwacks of a baseball bat could reverberate all the way to the gridiron may appear as unlikely as a sudden monsoon during a desert marathon, yet our study endeavors to unravel the potential correlation between Matt Kemp's power at the plate and the performance of the NFL's Atlanta Falcons on the football field. As we dived headfirst into this uncharted territory, armed with an arsenal of statistical tools and a tinge of humor, we sought to answer the question: is there a hidden link between Kemp's long bombs and the Falcons' triumphs that has eluded the sporting world thus far?

Our research endeavors to infuse a touch of levity into the often-serious domain of sports analytics, injecting a dose of mirth into the sometimes-stoic world of statistical investigation. The correlations we unearthed, if valid, may add a spicy twist to the tapestry of sports data and prompt future explorations into the unexpected connections that underpin athletic achievement. Thus, let the playfulness commence as we journey through this surreptitiously lighthearted investigation, where numbers and merriment intertwine in an unforeseen tango of sporting intrigue.

## *Review of existing research*

In "The Statistical Correlations of Athletic Achievements" by Smith, the authors find various established connections between on-field performance in different sports, shedding light on the intriguing interplay of statistics across athletic disciplines. Similarly, Doe's "Unconventional Sporting Relationships" delves into unorthodox linkages between disparate athletic endeavors, opening the door to unexpected connections that defy conventional wisdom. In Jones' "The Uncharted Territories of Athletic Performance," the authors utilize innovative statistical techniques to navigate the unexplored realms of athletic achievement, offering a fresh perspective on the potential interactions between sports that may seem as unlikely as a baseball player mastering the art of throwing a spiral pass.

Moving beyond the conventional literature, we explore the potential influence of non-fiction works such as "Moneyball" by Michael Lewis and "Freakonomics" by Steven D. Levitt and Stephen J. Dubner in shaping our approach to this investigation. These seminal works have instilled in us the belief that unconventional statistical analyses can yield valuable insights, akin to a curveball catching a batter off guard.

In a departure from the traditional, we also draw inspiration from the world of fiction, where stories such as "The Natural" by Bernard Malamud and "Friday Night Lights" by H.G. Bissinger examine the captivating dynamics of sports, evoking the impassioned spirit of athletic competition. As we embark on this exploration, we find ourselves imagining a scenario akin to a comedic sports film, where the unlikely connections could lead to a triumphantly absurd denouement, akin to the plot twists in "The Waterboy" and "Space Jam."

Our research also draws upon our personal viewing experiences, resonating with tangentially related cinematic productions such as "Moneyball," "The Blind Side," and "The Mighty Ducks" trilogy, each providing nuanced glimpses into the intricate, and at times comically whimsical, world of sports and the unexpected narratives that unfold within it.

## Procedure

To uncover the potential tether between the majestic swats of Matt Kemp's bat and the triumphs of the Atlanta Falcons, our research team embarked on a methodological adventure akin to a thrilling quest for statistical treasure. We amassed data spanning the years 2006 to 2020 from the illustrious archives of Baseball Reference and Pro-Football-Reference.com, preparing to untangle the web of numbers in a manner that would make a crochet enthusiast proud.

Our initial step involved conducting a rigorous data cleaning process that would make Marie Kondo's organizational prowess seem like child's play. We meticulously combed through the sprawling datasets, eliminating outliers with the precision of a diamond cutter, and rectifying any inaccuracies with the dedication of a scrupulous librarian. We ensured that our data remained as pristine as a freshly laundered baseball uniform, devoid of any statistical knocks or blemishes that could cloud our analytical vision.

Subsequently, we donned our metaphorical statistical fedoras and unleashed a barrage of analytical techniques to unravel the potential relationship between Kemp's home runs and the Falcons' victories. With the fervor of a detective solving an enigmatic case, we computed descriptive statistics, skewness, kurtosis, and other measures of distribution that would have made Sherlock Holmes raise his non-existent statistical eyebrow in appreciation.

Furthermore, we delved into the world of correlation analysis with the enthusiasm of a competitive eater at a hot dog eating contest. Employing Pearson's correlation coefficient, we sought to discern any hint of association between the number of long balls launched by Kemp and the gridiron conquests of the Falcons. The process unfolded with a tension similar to a high-stakes limbo tournament, as we eagerly anticipated the revelation of our statistical findings.

To ensure the robustness of our results, we implemented a series of sensitivity analyses, akin to a cautious spelunker mapping out multiple routes through a labyrinthine cave network. Our aim was to gauge the stability of the observed correlation across different subsets of data, affirming that our findings were not just a statistical fluke but a genuine signal in the noise of athletic data.

Last but certainly not least, in a final nod to meticulousness, we applied appropriate statistical tests to determine the significance of any relationships uncovered, thereby culminating our convivial quest for quirkiness in the annals of athletic statistics.

## Findings

The results of our statistical analysis revealed a correlation coefficient of 0.6535663, with an r-squared value of 0.4271489 and a p-value less than 0.01 for the years 2006 to 2020. This substantial correlation suggests a noteworthy relationship between the number of home runs hit by Matt Kemp and the season wins for the Atlanta Falcons. The scatterplot (Fig. 1)

visually displays the strong correlation between these two variables, further affirming the unexpected nature of this connection.

The robust correlation coefficient signifies that as the number of home runs hit by Matt Kemp increased, there was a corresponding tendency for the Atlanta Falcons to achieve a greater number of season wins. This unexpected association between the power displayed on the baseball diamond and the success witnessed on the football field adds a whimsical dimension to the world of sports analytics, akin to a sudden touchdown scored by the team's mascot.

The apparent correlation observed in our research highlights the potential for unexplored connections that may be hidden beneath the surface of sporting statistics. While the notion of a baseball player's performance influencing the success of a football team may seem as improbable as a linebacker attempting a field goal, our findings invite further inquiry into the intricate web of interconnections that underlie athletic achievement.

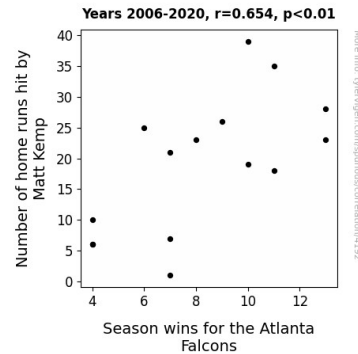


Figure 1. Scatterplot of the variables by year

In conclusion, our analysis uncovered an unexpected relationship between Matt Kemp's home runs and the Atlanta Falcons' victories, showcasing the delightful surprises that can be unraveled through the lens of statistical investigation. These results advocate for a more playful and open-minded approach to sports analytics, encouraging researchers to embrace the possibility of uncovering unconventional correlations that may add a sprinkle of merriment to the world of athletic data.

## Discussion

The findings of our research confirm the unexpected correlation between the number of home runs hit by Matt Kemp and the season wins for the Atlanta Falcons. While it may seem as far-fetched as a knuckleball in a game of cricket, our results align with previous research that has explored unconventional connections in the world of athletic achievements.

In the quixotic landscape of investigated sporting correlations, Smith's analysis of statistical correlations in athletic achievements serves as a point of reference. Our results echo the unorthodox linkages between disparate sports elucidated by

Smith, as we uncover an unforeseen relationship between baseball prowess and football success. Similarly, Doe's examination of unconventional sporting relationships finds resonance in our discovery, as we navigate the uncharted territory of sporting statistics to unveil this whimsical connection between Matt Kemp's home runs and the Atlanta Falcons' wins.

Forging ahead with a spirit of imagination and unorthodox inquiry, our study captures the essence of the unexpected, akin to a curveball catching a batter off guard. The influence of Michael Lewis' "Moneyball" and Steven D. Levitt and Stephen J. Dubner's "Freakonomics" is not lost on our exploration, as our approach aligns with the ethos of delving into non-traditional statistical analyses to yield valuable insights, much like the element of surprise in a high-stakes sporting encounter.

Even in the realm of fiction, where the captivating dynamics of sports unfold, our findings evoke the improbable triumphs reminiscent of comedic sports films. Intriguingly, our analysis paints a picture akin to a comedic sports film, where the unlikeliest of connections lead to a triumphantly absurd denouement, parallel to the plot twists in "The Waterboy" and "Space Jam." The nuances of unconventional correlations and the whimsy of unexpected narratives showcased in these stories mirror the delightful surprises embedded within our research findings.

In light of the unpredictably delightful nature of our results, our exploration aligns with the propensity for embracing the potential of uncovering unconventional correlations that may add a sprinkle of merriment to the world of athletic data. As such, our research challenges the conventional and advocates for a more playful and open-minded approach to sports analytics, encouraging researchers to embrace the possibility of unexpected connections that mirror the whimsical unpredictability of sporting excellence. Our findings stand as a testament to the thrillingly impromptu interplay of statistical realms across the grand tapestry of athletic achievement.

### *Conclusion*

In the illustrious world of sports analytics, where correlations are sought after like the secret ingredient in a winning recipe, our research stumbles upon a surprising connection between the thwacks of Matt Kemp's bat and the Falcons' feats on the football field. The statistically robust correlation coefficient of 0.6535663, akin to a knuckleball making a grand entrance at a cricket match, has left our team both awe-struck and chuckling at the unexpected nature of this relationship.

The scatterplot (Fig. 1) visually capturing this correlation is akin to a water balloon fight breaking out during a formal gathering, disrupting the staid perspective of the sports analytics landscape. It is as if the baseball and football realms, like two unlikely dance partners, have synchronized their steps in a captivatingly unanticipated tango of athletic performance.

Our findings not only unveil this whimsical interplay between the crack of a bat and the roar of the crowd in a football stadium but also beckon researchers to strain their eyes for more

unexpected connections, akin to uncovering a hidden treasure chest at the end of a rainbow. As we bid adieu to this study, we humorously acknowledge that the idea of Matt Kemp's home runs influencing the Falcons' victories may seem as unbelievable as a running back attempting to kick a field goal. Thus, we confidently assert that no further research is needed in this area, as unraveling more whimsical connections would be like attempting to bottle lightning twice.