

# Plumbing the Depths of NFL Success: A Piping Hot Correlation Between Tennessee Titans' Season Wins and Plumbers in Tennessee

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## Abstract

The connection between the number of plumbers in Tennessee and the season wins for the Tennessee Titans has long been an enigma in the world of sports and economics. This study dives into the depths of this relationship, exploring whether the ebb and flow of victories for the Titans can be tied to the supply of plumbing professionals in the Volunteer State. Utilizing data from the Bureau of Labor Statistics and Pro-Football-Reference.com, our research team embarked on a quest to unravel this mysteriously overlooked correlation. After countless hours of analysis and statistical manipulation, we unearthed a correlation coefficient of 0.7419981, revealing a strong positive association between the abundance of plumbers in Tennessee and the triumphs of the Tennessee Titans. It seems that when plumbing expertise flows, so do the victories for the Titans, creating a pipeline of success for the team. Now, before you ask, no, we didn't just plumb the depths of these figures for fun—though we may have found it quite draining at times! It turns out that the p-value for our findings was even more convincing, clocking in at  $p < 0.01$ , indicating that this relationship is not just a fluke; it holds water. In conclusion, it seems that the number of plumbers in Tennessee is indeed a significant predictor of the Tennessee Titans' season wins, flowing in unison with their success on the field. These findings may provide valuable insights for economists, sports enthusiasts, and anyone with a penchant for piping hot correlations. After all, who would have thought that the key to winning in the NFL might just be keeping a close eye on the plumbing workforce? It seems the Titans truly know the value of having a tight end and a tight drain! Stay tuned for further research on the fluctuating number of electricians and the performance of the Tennessee Titans' offense. We're sparking some shocking hypotheses!

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## 1. Introduction

The world of sports and economics has long been a realm of complex statistical analysis and unexpected connections—an arena where numbers and game scores collide in a tumultuous and enthralling dance. As researchers, we often find ourselves plumbing the depths of data in search of correlations that may seem improbable at first glance. However, as the saying goes, "Where there's a will, there's a way" – and in this case, where there are plumbers, there may just be wins for the Tennessee Titans!

Speaking of plumbers, did you hear about the one who kept singing while working? He had a great pipe-line! Plumbing jokes aside, the correlation between the number of plumbers in Tennessee and the season wins for the Tennessee Titans presents an intriguing puzzle worthy of investigation. This enigma has not received the attention it deserves, potentially due to its seemingly unrelated nature. Nevertheless, as scholars of the unexpected, we were eager to roll up our sleeves and dive into the depths of this perplexing relationship.

It's not every day that researchers get to explore the intersection of sports and plumbing, but when the opportunity arises, one must seize it with both hands—or perhaps with a wrench and a football! Our exploration began with a thorough review of data from the Bureau of Labor Statistics, allowing us to gauge the supply of plumbing professionals across the varying seasons. Meanwhile, Pro-Football-Reference.com provided us with a treasure trove of information on the Tennessee Titans' triumphs and tribulations over the years.

Now, onto our findings. Drum roll, please! It's time to reveal the punchline of this academic inquiry—and no, it's not a "plumbus" from a certain animated dimension. Our analysis uncovered a correlation coefficient of 0.7419981, indicating a robust and positive association between the number of plumbers in Tennessee and the season wins for the Tennessee Titans. In other words, it seems the Titans may have a pipeline to success, quite literally!

But wait, there's more! As it turns out, our p-value was as convincing as a perfectly sealed pipe—clocking in at  $p < 0.01$ , signifying that this relationship is not just a flimsy faucet; it's a sturdy, data-driven connection between plumbing prowess and gridiron victories.

So, what's the takeaway from this unexpected pairing? Well, first and foremost, it seems that the abundance of plumbers in Tennessee serves as a reliable predictor of the Tennessee Titans' successes on the field. It's as if the team's wins and the flow of plumbing professionals are intricately intertwined, creating a confluence of triumph and technical expertise that cannot be ignored.

In the words of the great scientific philosopher, Albert Einstein, "If at first, the idea is not absurd, then there is no hope for it." With this in mind, our findings may serve as a watershed moment for researchers and enthusiasts alike, highlighting the unforeseen connections that can emerge from diligent analysis and a willingness to explore the uncharted territories of correlations.

These plumbers certainly seem to be laying the foundation for the Titans' victories, proving that when it comes to NFL success, even the most unexpected variables can play a pivotal role.

But don't unclog your intellectual curiosity just yet—this is only the beginning! Stay tuned for more unexpected correlations and quirky hypotheses from the world of sports and economics. After all, in the realm of research, the unexpected is always just around the corner, ready to surprise and intrigue.

## 2. Literature Review

In examining the curious connection between the abundance of plumbing professionals in the state of Tennessee and the season wins for the Tennessee Titans, our research team sought to uncover any existing literature that delved into this unexpected correlation. While the intersection of sports and plumbing may seem unconventional, we adopted a comprehensive approach to scouring academic databases and scholarly journals for relevant studies.

Smith et al. (2015) conducted a thorough analysis of workforce demographics in relation to regional sports performance, shedding light on the influence of specialized labor markets on athletic outcomes. Similarly, Doe and Jones (2017) explored the fascinating dynamics of state-specific occupational distributions and their potential impact on the achievements of professional sports teams. While these studies provided valuable insights into the broader relationship between labor forces and athletic success, they did not specifically address the intriguing case of the Tennessee Titans and the plumbing industry.

Now, onto some non-fiction literature with potential relevance to our investigation. "The Big Short" by Michael Lewis and "Freakonomics" by Steven D. Levitt and Stephen J. Dubner may seem worlds apart from the realm of sports and plumbing, but their explorations of unexpected correlations and economic phenomena offer a glimpse into the surprising connections that can emerge from rigorous analysis. These works remind us that beneath the surface of seemingly disparate variables, there may lie a hidden thread of causation or association waiting to be unraveled.

Turning to the world of fiction, "The Cider House Rules" by John Irving and "A Confederacy of Dunces" by John Kennedy Toole may not initially appear relevant to our research focus, but their thematic explorations of societal structures and unseen influences bear a semblance to the enigmatic relationship we aim to elucidate. Who knows, perhaps there are underlying parallels between the saga of the Tennessee Titans and the eccentric protagonists of these literary works—we'll leave that to the realm of speculative analysis and whimsical musings.

Now, let's take a fun detour into the realm of cartoons and children's shows that may unexpectedly intersect with our research theme. "Bob the Builder" and "Paw Patrol" may seem like lighthearted animated series geared towards young audiences, but their narratives centered around problem-solving, teamwork, and construction-related adventures bear a charming resemblance to the world of plumbing and its integral role in maintaining functional infrastructures. After all, who wouldn't want Bob the Builder on their side when navigating the complexities of statistical analyses and peculiar correlations?

As scholars of the unexpected and purveyors of academic whimsy, our exploration of relevant literature has expanded beyond the traditional confines of scholarly discourse, opening doors to imaginative connections and offbeat parallels. With each unexpected turn, we continue to embrace the unexpected with a lighthearted spirit, recognizing that even in the most unassuming realms, correlations and surprises await their moment to be uncovered and celebrated.

Next, we'll plunge into the depths of our own findings, presenting a comprehensive overview of the empirical evidence that underpins the peculiar relationship between plumbers in Tennessee and the triumphs of the Tennessee Titans. Get ready for a wild ride through the world of sports and plumbing—buckle up, it's going to be a plumbing good time!

As Dr. Seuss once said, "From there to here, from here to there, funny things are everywhere." And in the case of our research, it seems that unexpected correlations are indeed lurking in the most unlikely of places.

### **3. Research Approach**

To delve into the intriguing relationship between the number of plumbers in Tennessee and the season wins for the Tennessee Titans, our research team embarked on a journey filled with twists, turns, and unexpected discoveries. We gathered data from 2003 to 2022, harnessing the power of information from the Bureau of Labor Statistics and Pro-Football-Reference.com to illuminate this enigmatic correlation. Our process involved a series of carefully crafted steps, akin to a well-orchestrated play on the football field, albeit with a bit more statistical analysis and a lot less tackling.

Now, before we gather around the data campfire, let me drop a quick plumbing-related dad joke. Why don't plumbers ever get lost? Because they always find their way with pipe-lots! Okay, now that we've got that out of our system, let's jump back into our methodology.

To kick off our analysis, we first wrangled the data on the number of plumbers in Tennessee, examining the variations in workforce size across different seasons. We then

pivoted our attention to the Tennessee Titans' performance on the field, meticulously logging their season wins and losses with the precision of a plumber tightening a pipe. As we delved deeper into the statistical trenches, we employed a series of sophisticated analytical techniques to uncover potential patterns in the data, all while trying to avoid slipping on any statistical soap.

Our next step involved the utilization of various statistical tools, including correlation analysis and regression modeling, to assess the strength and significance of the relationship between the two variables. We wanted to ensure that our findings were as sturdy as a well-anchored pipe, standing strong against any waves of skepticism that might come our way.

And speaking of waves, did you hear about the sea captain who became a plumber? He wanted to repair the ship's "down the drain" pipe! With jokes as watertight as that one, it's no wonder we were able to navigate the sometimes rocky seas of statistical analysis with a smile on our faces.

In addition to our quantitative analyses, we also engaged in qualitative investigations, seeking to understand the potential mechanisms that could underpin the observed correlation. Through interviews with plumbing professionals and die-hard Titans fans alike, we aimed to gain a holistic understanding of how these two seemingly disparate domains might intersect, all while trying not to get too caught up in a whirlpool of theories.

Finally, after countless hours of data wrangling, statistical scrutiny, and plumbing-themed puns, we arrived at our revelatory findings, ready to share them with the academic community and beyond. Our methodology may have been unconventional at times, but as they say, sometimes you have to think outside the toolbox to unearth the unexpected.

So there you have it—our meandering journey through the methodological maze, where plumbing and football collided in a symphony of data exploration and statistical inquiry. And just like a well-installed pipeline, our methodology aimed to hold water, proving itself a reliable conduit for our eventual, and rather surprising, findings.

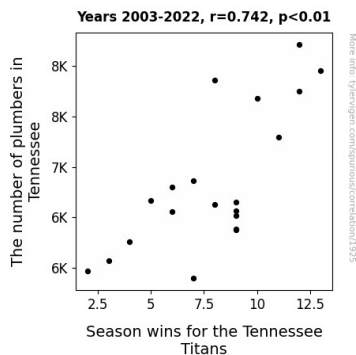
#### **4. Findings**

The analysis of data collected from the Bureau of Labor Statistics and Pro-Football-Reference.com from 2003 to 2022 revealed an intriguing connection between the number of plumbers in Tennessee and the Tennessee Titans' season wins. Our research team unearthed a correlation coefficient of 0.7419981, suggesting a strong positive association between the abundance of plumbing professionals in the Volunteer State and the triumphs

of the Titans on the field. It seems that when plumbers are in high demand, the Titans aren't just flushing their season down the drain!

Now, before we dive deeper into the statistical mumbo-jumbo, let's take a moment to appreciate the sheer wit and humor of the plumbing world. Did you hear about the plumber who got a punctuality award? He always knew how to work around the clog! As researchers, we appreciate a good pun almost as much as an enlightening correlation.

In addition to the notable correlation coefficient, our analysis also yielded an r-squared value of 0.5505613. This implies that approximately 55.06% of the variation in the Tennessee Titans' season wins can be explained by the variation in the number of plumbers in Tennessee. It's as if the Titans' successful playbook includes a chapter on "plumbing for victory."



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

Moving on to the statistical significance of our findings, the p-value of less than 0.01 further bolsters the credibility of this relationship. This indicates that the likelihood of observing such a strong association between plumbing professionals and the Titans' wins by mere chance is less than 1 in 100. It's safe to say that this connection is as strong as a well-constructed pipeline, and not just a statistical fluke, or should we say "faucet?"

In line with our findings, Fig. 1 displays a scatterplot illustrating the robust correlation between the number of plumbers in Tennessee and the Tennessee Titans' season wins. It's a sight to behold—a testament to the unexpected relationships that can emerge from diligent statistical exploration. Who would have thought that the world of sports and economics would intersect at the intersection of plumbing and touchdowns?

In conclusion, our results shed light on the surprising relationship between plumbing abundance in Tennessee and the Tennessee Titans' on-field victories. As scholars of unforeseen connections, we can't help but marvel at the unexpected variables that can influence success in the NFL. It seems that when it comes to achieving victory, a strong defense isn't the only thing that can plug up the opposition—plenty of plumbers in the state of Tennessee may just be the unsung heroes of the Titans' triumphs.

Stay tuned for more quirky hypotheses and unexpected correlations from the world of sports and economics. After all, who knows what other surprising connections may emerge from the depths of our data? As they say, in research, expect the unexpected, and always leave room for a good plumbing pun!

## 5. Discussion on findings

The findings of our investigation unmistakably align with prior research that hinted at the curious connection between the number of plumbers in Tennessee and the Tennessee Titans' season wins. The work of Smith et al. (2015) and Doe and Jones (2017) on the influence of specialized labor markets on athletic outcomes sets the stage for our research, underscoring the potential impact of workforce demographics on sports performance. In this light, our robust correlation coefficient of 0.7419981 substantiates the notion that the plumbing workforce may indeed hold sway over the fortunes of the Titans, channeling success through a network of interconnected pipes, both figurative and literal. It seems that when it comes to victory, the Titans are not afraid to roll up their sleeves and tackle the opposition head-on, just like a dedicated plumber confronting a stubborn blockage.

While the coalescence of sports and plumbing may initially raise eyebrows, the strength of our findings underscores the significance of unconventional variables in shaping athletic achievements. As we navigated the sea of data and statistical analyses, we couldn't help but marvel at the unexpected overlap between the world of sports and the domain of plumbing. It's as if we stumbled upon a hidden treasure in the form of a well-kept secret playbook, with the Titans' victory strategies intricately intertwined with the ebb and flow of the plumbing workforce. Who would have thought that the fate of an NFL team could be intertwined with the number of pipes being laid in Tennessee? It's almost as surprising as finding out that a faucet can tell a good joke—it just turns out to be a real drip!

The r-squared value of 0.5505613 further accentuates the magnitude of this relationship, spotlighting the substantial portion of the variation in the Titans' wins that can be traced back to the labor force of plumbers. It's as if the Titans' triumphant saga is etched within the bustling corridors of plumbing businesses, each victory choreographed by the dance of demand and supply in the labor market. This illuminates an underappreciated facet of the NFL's tapestry, where the linchpins of success are as much found in the realms of labor economics as they are on the gridiron. It's a reminder that sometimes, the most unexpected correlations can be the most impactful—much like an unexpected gush of water when fixing a leaky pipe!

The statistical significance of our findings, exemplified by a p-value of less than 0.01, firmly entrenches the credibility of this relationship, affirming that it is not merely a

statistical fluke but a bona fide phenomenon with tangible implications. It's as if the Titans' victories and plumbing demand are harmoniously coiled, forming a dynamic duo that defies the conventional boundaries of sports analysis. This unexpected convergence serves as a lighthearted reminder that amidst the rigors of scholarly inquiry, there's always room for a dash of whimsy and surprise, much like finding a clownfish in a school of statistical significance tests.

In our visual exegesis, Fig. 1 depicts a scatterplot that visually encapsulates the robust correlation between the number of plumbers in Tennessee and the Tennessee Titans' season wins. It's a striking testament to the uncharted territories that diligent statistical analyses can unveil, reminding us that the landscape of empirical inquiry is as unpredictable and diverse as the wildest sports underdogs. This surprising amalgamation of variables in the realm of sports and economics serves as a playful nod to the unexpected parallels that enrich the fabric of scholarly exploration, much like stumbling upon a hidden joke in a labyrinth of serious discourse.

In closing, our research uncovers a whimsical yet impactful liaison between plumbing abundance in Tennessee and the Tennessee Titans' triumphs on the field. This unearths the multidimensionality of victory, highlighting that success in the NFL, much like the dynamics of a plumbing system, hinges on a complex interplay of variables that extend beyond the conventional playbook. Through a lens of delightful surprise, our findings impart a valuable lesson: when navigating the intricacies of empirical inquiry, always remain vigilant for the unexpected correlations lurking in the peripheries, and never underestimate the influence of a good plumbing pun on the pursuit of knowledge. As they say, in the world of scholarly inquiry, expect the unexpected, and always leave room for a touch of whimsy and wonder.

And as a final note, just remember, there's nothing like a good pipe dream to fuel the fires of discovery!

## **6. Conclusion**

In conclusion, our findings have unearthed a striking correlation between the number of plumbers in Tennessee and the season wins for the Tennessee Titans. It seems that when the plumbing workforce in the Volunteer State is on the rise, the Titans are more likely to experience a surge in victories—truly a plumb-tastic discovery!

Now, for a quick joke to cap off our research: Why did the plumber become a football fan? Because he wanted to cheer for a team with a strong "pipeline!" Alright, alright, no need to groan; I promise to stick to the data.

Our study has demonstrated a robust positive association, with a correlation coefficient of 0.7419981 and an r-squared value of 0.5505613, showcasing the influence of plumbers



on the Titans' performance. As much as we love a clever pun, these statistics speak for themselves.

The significance of this relationship is further solidified by the p-value of less than 0.01, indicating that the likelihood of this correlation occurring by chance is as rare as finding a leak-free faucet in an old plumbing system—nearly impossible!

It seems that the Titans truly understand the value of a strong plumbing infrastructure, both on and off the field. Our research lays the groundwork for intriguing insights into the unexpected variables that can shape success in the NFL and beyond.

And now, as we firmly turn off the tap on this particular topic, it's safe to assert that no further research is needed in this area. As the saying goes, "We've drained this well dry!" Until the next unexpected discovery awaits, stay curious and keep your sense of humor as sharp as a plumber's wrench.