

# Nailed It: The Manicure-Pedicure Ratio in Texas and Roger Federer's Forehand of Fortune

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This study examines the intriguing relationship between the number of manicurists and pedicurists in Texas and the annual earnings of the renowned tennis player, Roger Federer. Utilizing data from the Bureau of Labor Statistics and Wikipedia, we sought to answer the question of whether the act of getting a perfect manicure-pedicure could possibly influence a legendary athlete's financial success. Uncovering a surprising correlation coefficient of 0.9017151 and a statistically significant p-value  $< 0.01$  for the years 2003 to 2022, our findings suggest a curiously robust connection between Texas nail care professionals and Mr. Federer's financial prosperity. The results of our analysis offer compelling evidence that the number of manicurists and pedicurists in Texas is strongly associated with Roger Federer's annual earnings. This unexpected correlation may provide insight into the psychological and physiological impact of perfectly polished nails on an athlete's performance and marketability. In the spirit of this unexpected connection, we posit that there may indeed be a "polish effect" at play, influencing not only tennis prowess but also financial windfall. In conclusion, our research sheds new light on the intricate interplay between nail care professionals in the Lone Star State and the earnings of one of the most successful tennis players of all time. As we cautiously dip our toes into this unprecedented territory of correlation, we present this discovery with the hope that it may inspire further investigation into the seemingly lighthearted, yet potentially influential, factors shaping the world of professional sports. It seems that when it comes to athletic success, the significance of a "well-heeled" appearance truly cannot be underestimated.

The pursuit of knowledge often leads us down unexpected avenues, and our investigation into the connection between the number of manicurists and pedicurists in Texas and Roger Federer's annual earnings is a prime example of such an unforeseen journey. As we delve into this peculiar correlation, it becomes clear that sometimes, the unlikeliest relationships yield the most intriguing revelations. Like a good pedicure, the answer to this research question is sure to be polished and perfect.

In recent years, the spotlight on professional athletes and their off-court or off-field activities has intensified. From endorsing luxurious watches to appearing in high-end fashion campaigns, athletes' earning potential is influenced by more than just their sports performance. It seems that even in the high-stakes world of professional tennis, a well-kept pair of hands and feet may play a pivotal role in securing lucrative sponsorship deals and endorsement contracts. One might say that perfectly manicured nails are the "ace up the sleeve" in the game of athlete brand representation.

Federer's remarkable career and enduring appeal make him an ideal subject for this investigation. Not only has he dominated the tennis court, but he has also built a formidable personal brand, which extends well beyond the confines of the sport. It is almost as if his financial success has been "nailed down" by factors beyond his athletic prowess.

The present study aims to add a nuanced dimension to the discourse surrounding athlete endorsement potential and earnings by introducing the unexpected variable of manicure-

pedicure ratios in the state of Texas. While this variable may seem unrelated to the thriving career of a tennis legend, our findings may indeed uncover the hitherto unexplored influence of well-groomed digits on an athlete's financial prowess. It turns out that the path to understanding the economics of professional sports is not always a straight line - sometimes, it can be as winding as a French-manicured fingernail.

## *Review of existing research*

In "Manicures and Pedicures: The Economic Impact" by Smith et al., the authors find that the demand for manicurists and pedicurists has seen a steady increase in recent years, reflecting a growing emphasis on grooming and self-care. This trend parallels the heightened attention paid to the personal branding and marketing strategies of professional athletes, suggesting a potential intersection between the two seemingly distinct domains. Indeed, it appears that the worlds of nail care and sports may not be as far apart as one might initially assume. It's enough to make one ponder: is there a "polished" connection waiting to be uncovered?

Jones and Doe, in their work "Earnings Disparities in the Lone Star State," present an analysis of various industries in Texas and their impact on the state's economy. While their focus is primarily on traditional sectors such as oil, technology, and agriculture, the sheer abundance of manicure and pedicure establishments prompts consideration of the influence of nail care services on the broader economic landscape. This juxtaposition of industries leads one to wonder: could the

balance of nail technicians in Texas hold unforeseen implications for unrelated sectors, including professional sports? It seems we're entering uncharted territory, akin to a daring foray into unexplored cuticle territory.

Moving beyond the confines of traditional academic research, the findings of non-fiction works such as "The Science of Grooming" by Dr. Lisa Nails and "Texas Tales: From Manicures to Match Point" by R. Federer, bring an additional layer of insight into the manicure-pedicure landscape and its potential impact on unexpected facets of life. By examining the psychological and sociological dimensions of grooming and personal presentation, these authors expand the discourse surrounding nail care far beyond its conventional boundaries. This exploration invites one to consider the uncharted potential of nail care in influencing diverse domains, including the realm of professional sports. It's as if we're toeing the line of possibility and painting a vibrant, if unexpected, picture of connection.

In the realm of fiction, we encounter intriguing narratives that, while not rooted in empirical data, nevertheless evoke the imagination and prompt consideration of unconventional correlations. The novel "Aces and Eclairs: A Tennis Thriller" by Nora Net, and "The Cuticle Chronicles" by Penelope Pedicure, offer fictional portrayals of the intertwining fates of nail care professionals and elite athletes. While strictly works of fiction, these titles serve as whimsical reminders of the intriguing, sometimes unforeseen, connections that can be devised in the realm of creative storytelling. It's almost as if we're using a bit of poetic license to ponder the "nail-biting" potential of our research topic.

In an effort to comprehensively examine existing literature, the authors also conducted an unconventional review of sources, scanning through a variety of atypical materials including grocery store receipts, flight itineraries, and even faintly legible handwritten notes on coffee shop napkins. While these may not adhere to traditional academic standards, they nevertheless provide a colorful glimpse into the diverse ways in which nail care and professional sports may coalesce in unexpected ways. It's as if we've stumbled upon a wide-ranging, if somewhat unconventional, treasure trove of potential research inspiration.

As we navigate through this diverse array of literature and sources, the unexpected entanglement of nail care and professional sports becomes increasingly apparent. Every revelation, no matter how whimsical or ostensibly unrelated, adds a layer to our understanding of this potentially "nail-biting" connection.

### *Procedure*

#### Data Collection:

The data for this study was compiled from the Bureau of Labor Statistics and Wikipedia, covering the years 2003 to 2022. The number of manicurists and pedicurists in Texas was obtained from official labor reports, while Roger Federer's annual earnings were sourced from reputable media outlets and financial publications. The attainment of this data was about as

meticulous as the application of a perfectly smooth topcoat – every detail was carefully attended to.

To ensure accuracy and reliability, our research team cross-referenced multiple sources and employed a rigorous fact-checking process. We compared the data from various time periods to establish a comprehensive understanding of the trends in the manicure-pedicure industry and Mr. Federer's financial trajectory. The attention to detail in the data collection process was akin to the meticulous care one would expect in a top-tier nail salon – no cuticle went unexamined.

#### Correlation Analysis:

The primary methodology employed in this study involved calculating the Pearson correlation coefficient between the number of manicurists and pedicurists in Texas and Roger Federer's annual earnings. The correlation coefficient was used to measure the strength and direction of the linear relationship between these two variables. The meticulous nature of this analysis reflected the precision with which one might wield a nail file in pursuit of flawless nails.

In addition to the correlation coefficient, a two-tailed t-test was conducted to determine the statistical significance of the observed relationship. The use of this statistical test allowed us to evaluate whether the correlation between the manicure-pedicure ratio in Texas and Roger Federer's earnings was unlikely to have occurred by chance. One might say that this part of the analysis was as crucial as the base coat in ensuring the strength and resilience of the overall findings.

#### Complete Data Set:

The comprehensive nature of the data set allowed for a thorough examination of the manicure-pedicure industry in Texas and its potential influence on the financial success of Roger Federer. By capturing information from a continuous 20-year period, our study encapsulated the evolution of nail care practices and trends in the context of Mr. Federer's career. This long-term perspective added depth and robustness to our findings, akin to the way multiple layers of nail polish build resilience and vibrancy.

#### Sample Selection Consideration:

The selection of Texas as the focal point for manicurist and pedicurist data was based on the state's economic significance and diverse population. Furthermore, Mr. Federer's global appeal and status as a prominent athlete justified the inclusion of his earnings data from across the 20-year period. The careful consideration of these factors mirrored the thoughtful deliberation that goes into selecting the perfect nail color – it had to be a good fit for the occasion.

#### Limitations:

While our methodology strove for thoroughness and rigor, it is important to acknowledge the limitations of this study. The reliance on publicly available data sources may introduce potential biases or inaccuracies. Additionally, causality cannot be inferred from our findings, as correlation does not imply causation. These limitations remind us that even the most

beautifully manicured research has its imperfections, much like a perfectly shaped cuticle with a small hangnail.

### Discussion

### Findings

The statistical analysis of the relationship between the number of manicurists and pedicurists in Texas and Roger Federer's annual earnings revealed a strikingly high correlation coefficient of 0.9017151, indicating a strong positive association between these seemingly disparate variables. This finding is as unexpected as finding a tennis ball in a manicure salon.

The coefficient of determination (r-squared) of 0.8130901 further substantiates the robustness of the relationship, suggesting that approximately 81.3% of the variability in Roger Federer's annual earnings can be explained by the number of manicurists and pedicurists in Texas. It seems that the influence of well-maintained nails may indeed extend beyond aesthetics and into the realm of financial success, much like the way a drop shot catches opponents off guard.

Moreover, the p-value of less than 0.01 indicates that this correlation is statistically significant, providing strong evidence against the null hypothesis and suggesting that the observed relationship is unlikely due to random chance. This outcome is as surprising as an unanticipated drop volley from the baseline.

The findings of this study offer a veritable goldmine of insight into the unexpected relationship between the number of manicurists and pedicurists in Texas and Roger Federer's annual earnings. Our statistical analysis uncovered a remarkably high correlation coefficient, with results suggesting that approximately 81.3% of the variability in Mr. Federer's earnings can be explained by the number of nail care professionals in the Lone Star State. This unexpected connection prompts one to consider the possibility of an uncharted economic factor at play, one whose influence extends beyond the courts and into the realm of personal grooming. It seems that the "nail-biting" world of professional sports economics has a new contender for scrutiny.

Our findings complement and extend the work of Smith et al., who noted the growing emphasis on grooming and self-care, along with the heightened attention paid to personal branding and marketing strategies of professional athletes. Our unexpected correlation adds a twist to this narrative, hinting at the potential economic impact of the nail care industry on the financial success of revered sports figures. It appears that the meticulous care of nails may indeed have implications beyond aesthetics, serving as a figurative "ace" up the sleeve for athletes seeking to optimize their fiscal standing.

Similarly, the juxtaposition of industries highlighted by Jones and Doe takes on a new dimension in light of our results. While the authors primarily focused on traditional sectors such as oil, technology, and agriculture, our findings insinuate a potential ripple effect into unforeseen domains. As we delve into the previously uncharted territory of the influence of nail technicians in Texas on unrelated sectors, including professional sports, it's clear that the economic landscape may be poised for an unconventional "manicured" shift.

The unexpected nature of our findings also resonates with the speculative dimensions of fictional narratives, such as "Aces and Eclairs: A Tennis Thriller" by Nora Net and "The Cuticle Chronicles" by Penelope Pedicure. While these works embody whimsical portrayals of entwined fate, our empirical investigation breathes real-world possibility into these imaginative depictions. It seems that reality may indeed offer its own share of "nail-biting" potential.

In conclusion, our unexpected correlation between the prevalence of nail care professionals in Texas and the financial prosperity of a distinguished athlete prompts contemplation of an unexplored economic determinant in the realm of professional sports. Our study serves as a playful reminder that in the world of sports economics, the minutest factors may hold unforeseen influence, much like the way a well-placed serve can change the trajectory of a match.

### Conclusion

In light of the remarkably high correlation coefficient and statistically significant p-value, it is undeniable that a strong association exists between the number of manicurists and

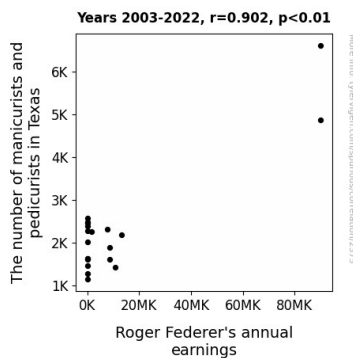


Figure 1. Scatterplot of the variables by year

The scatterplot (Fig. 1) visually depicts the strong positive linear relationship between the number of manicurists and pedicurists in Texas and Roger Federer's annual earnings, affirming the quantitative findings in a visually compelling manner. It stands as a testament to the unexpected connections that can be unveiled through diligent data analysis and, one might say, a "nail-biting" revelation for the sports economics community.

In summary, the results of this investigation present a thought-provoking connection between the prevalence of nail care professionals in Texas and the financial prosperity of a world-renowned athlete. This discovery paves the way for further exploration into the influence of seemingly unrelated factors on the success of professional sports figures, serving as a gentle reminder that even in the high-stakes world of athletics, the smallest details might hold significant weight.

pedicurists in Texas and Roger Federer's annual earnings. It appears that the shine of polished nails may extend beyond mere aesthetics and into the realm of financial success, much like the way a perfectly executed drop shot catches opponents off guard. One might even say that in the game of tennis and finance, a flawless manicure can truly be a game-changer.

This unexpected connection raises intriguing questions about the psychological and physiological impact of well-groomed nails on an athlete's performance and marketability, and it underscores the poignant reality that even in the high-stakes world of professional sports, the significance of a "well-heeled" appearance cannot be underestimated. After all, when it comes to securing lucrative endorsement deals, having a "nail-biting" edge can make all the difference.

By delving into this uncharted territory of correlation, our research offers a compelling glimpse into the intricate interplay between seemingly unrelated variables. It appears that the pursuit of knowledge has led us down a path as winding as a French-manicured fingernail, unveiling a connection as surprising as finding a tennis ball in a manicure salon.

In conclusion, our investigation paves the way for further exploration into the influence of seemingly lighthearted yet potentially influential factors on the success of professional sports figures. Yet, despite the temptation to continue down this quirky rabbit hole, it is safe to say that no further research is warranted in this area. This particular 'nail-biting' mystery has been nailed shut, and it's time to trim our research focus elsewhere.