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# Tongue-Twisters and Triplet Tales: Exploring the Correlation Between Foreign Language Degrees and Triplet Birth Rates in the US 

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#### Abstract

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#### Abstract

This paper investigates the intriguing relationship between the number of Bachelor's degrees awarded in Foreign languages, literatures, and linguistics and the birth rates of triplets or more in the United States. While the subject matter may seem whimsical at first glance, our research team delved deep into the data to uncover any potential connections between linguistic proficiency and multiple births. Using information from the National Center for Education Statistics and the Centers for Disease Control and Prevention for the period between 2012 and 2021, we applied statistical analysis to unravel this peculiar correlation. With a correlation coefficient of 0.9729070 and a p-value less than 0.01 , our findings demonstrate a surprisingly strong association between the two seemingly unrelated phenomena. Could it be that studying foreign languages stimulates the brain in such a way that it leads to an increased likelihood of conceiving triplets? Or perhaps the romanticism of foreign literature sparks a surge in family planning whimsy? While our investigation does not offer a definitive explanation for this unexpected correlation, it certainly invites a humorous speculation. This study sheds light on the playful side of statistical analysis and prompts further inquiry into the fantastical world of seemingly unrelated trends.


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## 1. Introduction

The pursuit of knowledge often leads researchers down unexpected paths, and
none more whimsical than the exploration of the correlation between Bachelor's degrees awarded in Foreign languages, literatures, and linguistics and the birth rates of triplets or more in the United States. While some may scoff at the notion of probing the link between linguistic studies and multiple births, our research endeavors to unravel the mysteries that lie beneath the surface of statistical data.

It is widely known that a foreign language can open doors to new cultures, literature, and, perhaps unsurprisingly, unexpected statistical trends. In our endeavor, we aim to offer a lighthearted yet rigorous examination of this unlikely pair, acknowledging the potential for tongue-in-cheek interpretations while upholding the fundamental principles of scientific inquiry. After all, as researchers, we must navigate through the labyrinth of statistical analysis with a sense of humor, lest we find ourselves lost in a maze of correlation coefficients and p-values.

As we embark on this scholarly escapade, we invite our readers to indulge in the peculiar intersections of research and levity, for who knew that foreign language degrees and triplet birth rates would find themselves entangled in such an unexpected waltz of statistics? This study stands as a testament to the unpredictable, yet undeniably amusing, nature of research, where the whimsical can intersect with the empirical with surprising frequency. So, dear reader, fasten your seatbelts and brace yourselves for a journey through the delightful and data-driven domains of linguistic studies and family planning, where statistical significance meets storytelling in an unlikely embrace.

With statistical software as our compass and academic rigor as our guiding star, let us venture forth to uncover the unexpected correlations that lie beneath the surface of seemingly disparate phenomena. For as Albert Einstein once quipped, "The most beautiful thing we can experience is the
mysterious. It is the source of all true art and science." And what could be more mysterious and artful than the unexpectedly intertwined threads of foreign language degrees and triplet birth rates?

## 2. Literature Review

The curious correlation between Bachelor's degrees in Foreign languages, literatures, and linguistics and the birth rates of triplets or more has piqued the interest of scholars and enthusiasts alike. While many at first glance may question the plausibility of any connection between the majesty of multilingual mastery and the marvel of multiple births, the literature offers some surprising insights that we simply can't gloss over.

In "Smith et al.'s Linguistic Luminescence," the authors find that a deep dive into the world of foreign language studies can cultivate not only linguistic prowess but also an appreciation for the nuances of communication. As we wade into the linguistic ocean, we're struck by the inescapable realization that multiple births, much like the intricacies of language, are a marvel to behold. The link between the two becomes as clear as the grammar rules in a language with only seven irregular verbs almost nonexistent, but not entirely absent.

Further shedding light on the subject, "Doe and Jones' Polyglot Paradox" delves into the possibility that the multitudinous nature of multiple births could potentially find a parallel in the complex tapestry of linguistic diversity. It appears that the more linguistic paths one treads, the greater the chance of stumbling upon unexpected correlations, much like stumbling upon a rare dialect spoken exclusively by left-handed individuals on a remote island.

Moving onto relevant non-fiction literature, "The Language Instinct" by Steven Pinker and "Babel: Around the World in 20

Languages" by Gaston Dorren provide a backdrop to our investigation, drawing attention to the vast array of languages and the fertility of linguistic diversity. And who can forget the timeless classics, "One Hundred Years of Solitude" by Gabriel Garcia Marquez and "The Shadow of the Wind" by Carlos Ruiz Zafón, which offer a tantalizing glimpse into the world of foreign literatures that may have inadvertently birthed not only memorable stories but also unexpected statistical phenomena.

In a more unconventional turn, social media has also contributed its own unique perspectives. A tweet by @TripletTales muses, "Could the allure of linguistic allure lead to a trio of tiny tyrants terrorizing your tidy town? \#TongueTwistersAndTripletTales," drawing attention to the potential consequences of dabbling in linguistic sorcery and its probable impact on family planning - a thought both whimsical and worryingly plausible.

As we immerse ourselves in the colorful tapestry of linguistic pursuits and curious childbirth statistics, it becomes increasingly evident that the intersection of these seemingly disparate realms holds the potential for amusement and insight. The literature, much like the unfolding chapters of an unexpected novel, invites us to embrace the delightful absurdity of this correlation, prompting a realization that statistical analysis, much like life itself, has a wondrous way of surprising us at every turn.

## 3. Our approach \& methods

To untangle the enigmatic relationship between Bachelor's degrees awarded in Foreign languages, literatures, and linguistics and the birth rates of triplets or more in the United States, our research team embarked on a whimsical yet methodologically rigorous journey. Our data
collection process involved mining the depths of the internet, navigating through a sea of websites and databases, and occasionally feeling like intrepid explorers in search of statistical treasure. We primarily sourced our information from the National Center for Education Statistics (NCES) and the Centers for Disease Control and Prevention (CDC), embracing the digital age's bounty of data while resisting the temptation to fall into the information overload abyss (a perilous place where many a researcher has lost their way).

As we sifted through the data from 2012 to 2021, we faced the perennial challenge of distinguishing signal from noise, akin to separating pearls of statistical wisdom from the sand of arbitrary fluctuations. Our statistical analysis involved intricate dances with software tools designed to wrangle, massage, and scrutinize data with the precision of a linguistic aficionado parsing through intricate prose. We spared no effort in rigorously accounting for potential confounding variables, ensuring that our analysis remained as clear and unambiguous as a well-articulated foreign language sentence.

The data on Bachelor's degrees awarded in Foreign languages, literatures, and linguistics were scrutinized with the fervor of a language enthusiast dissecting the nuances of grammar, while the birth rates of triplets or more were carefully scrutinized with the attention to detail one might expect from a triplet birth announcement. Each dataset was treated with the respect and diligence it deserved, as we sought to uncover any subtle connections lurking beneath the surface.

After collating the data and performing the requisite data sorcery-also known as statistical analysis-we derived correlation coefficients and $p$-values with the singular focus of a codebreaker deciphering an encoded message. The correlations were scrutinized with the discerning eye of an
editor examining a particularly complicated piece of literature, and we proudly emerged with a correlation coefficient of 0.9729070 and a p-value less than 0.01 . We knew we were onto something remarkable, akin to stumbling upon a rare linguistic quirk in a foreign text.

Throughout the entire research process, we endeavored to maintain a lighthearted spirit, recognizing that scientific inquiry need not always be a solemn affair. Instead, we embraced the playful side of statistical analysis, all while upholding the hallowed tenets of sound research methodology. After all, who says statistical analyses can't have flair and pizzazz? It's not every day that one gets to marry the art of statistical inquiry with the whimsy of linguistic explorations, and we relished every moment of this peculiar intellectual waltz.

In conclusion, our methodology encompassed a blend of scholarly rigor and good-natured whimsy, akin to a well-versed polyglot playfully engaging with the nuances of language. This approach allowed us to embark on a scholarly escapade unlike any other, uncovering the unexpectedly delightful correlations that lie at the intersection of linguistic studies and family planning.

## 4. Results

The results of our investigation into the correlation between Bachelor's degrees awarded in Foreign languages, literatures, and linguistics and the birth rates of triplets or more in the United States have left the research team both bewildered and bemused. The correlation coefficient of 0.9729070 suggests a robust relationship between these two seemingly incongruous variables, prompting a chorus of raised eyebrows and curious chuckles in the hallowed halls of academia. The r-squared value of 0.9465481 further supports the solidity of this connection, leaving us with
the realization that truth is indeed stranger than fiction.

Fig. 1 offers a visual depiction of this unexpected dalliance between linguistic prowess and the proliferation of triplet bundles. The scatterplot resembles a whimsical work of art, with data points frolicking in a dance of statistical significance. As we gazed upon this graphical representation, we couldn't help but marvel at the unanticipated harmony between foreign language achievements and the joyous chaos of triplet births.

It is essential to note that a $p$-value of less than 0.01 underscores the statistical significance of our findings. This means that the likelihood of observing such a strong relationship between foreign language degrees and triplet birth rates by random chance alone is, well, less likely than finding a four-leaf clover in a field of statistical inquiries.


Figure 1. Scatterplot of the variables by year
In conclusion, our research has brought to light a correlation that undoubtedly tickles the funny bone of statistical aficionados and linguaphiles alike. While we may not have unraveled the enigma behind this whimsical association, our findings serve as a testament to the delightful surprises that await those who dare to tread the path of scientific inquiry with a dash of humor and a twirl of curiosity.

## 5. Discussion

Our investigation into the correlation between Bachelor's degrees awarded in Foreign languages, literatures, and linguistics and the birth rates of triplets or more in the United States has unveiled a connection that is as intriguing as it is unexpected. While some might wave off the idea of a linguistic lilt leading to a litter of triplets as sheer folly, our findings, much like a well-timed knock-knock joke, have left us pleasantly surprised.

It's rather comical how our results support the prior research that we initially treated as fanciful fodder for academic banter. Smith et al.'s "Linguistic Luminescence" seemed to metaphorically wave a semaphore signal in a sea of linguistic studies, beckoning us to recognize the possibility of a link between the eloquence of foreign languages and the eloquence of triplet births. Similarly, Doe and Jones' "Polyglot Paradox" played a figurative game of hopscotch with our minds, leading us to consider the strategic leaps of logic required to connect the complexities of linguistics with the complexities of multiple births. It's as if the punchline to a statistical joke has been revealed, and we find ourselves nodding in both amusement and awe.

The picturesque scatterplot presented in Fig. 1 is akin to a Monet painting of statistical intrigue, with data points dancing like mischievous sprites in a forest of hypothesis testing. The subtle nuances of statistical significance tease our senses much like the unexpected twist at the end of a suspenseful thriller. With a correlation coefficient of 0.9729070 and an r-squared value of 0.9465481 , our findings not only support, but practically shout from the rooftops, the validity of this whimsical correlation.

The $p$-value of less than 0.01 is the exclamation mark at the end of a well-
crafted pun, emphasizing the unlikelihood of this remarkable relationship being mere happenstance. This finding is more surprising than discovering that the square root of negative one had been secretly dating pi all along, hidden in the depths of number theory.

As we ponder the implications of our study, we find ourselves reminded of the age-old question: Which came first, the linguistic proficiency or the triplet conception? Could the eloquence of foreign languages be so alluring that it leads to a symphony of biological symmetries? Or perhaps there is a delightful, albeit statistically improbable, harmony between the intricacies of linguistic exploration and the wondrous chaos of triplet tales that our analysis has brought to light.

In conclusion, the correlations we have uncovered are a testament to the enchanting quirks that reside within the annals of statistical inquiry. This exploration, much like a carnival of curiosities, nudges us to embrace the vibrant unpredictability of statistical relationships, reminding us that sometimes the most fantastical connections are found in the unlikeliest of places. As we stand at this crossroads of linguistic wonderment and familial fascination, we are prompted to recognize that statistical analysis, much like the quirkiness of life, often holds a whimsical surprise or two for those willing to peer through the looking glass of data and dare to ask, "What if?"

## 6. Conclusion

In wrapping up our investigation into the perplexing interplay between Bachelor's degrees in Foreign languages, literatures, and linguistics and the birth rates of triplets or more in the United States, we find ourselves tickled by the whimsy of our findings. The robust correlation coefficient of 0.9729070 points to a connection that is as unexpected as finding Bigfoot sipping tea
with the Loch Ness Monster in a statistically significant cafe. Our r-squared value of 0.9465481 further solidifies the notion that truth is indeed stranger than fiction, especially when it comes to the unanticipated alignment of linguistic expertise and the proliferation of triplet bundles.

As we contemplated our scatterplot, we couldn't help but envision a statistical ballet unfolding before our very eyes, with data points pirouetting with grace and aplomb. This visual representation is a testament to the harmonious chaos that arises when foreign language proficiency meets the joyous bedlam of triplet births.

Furthermore, our p-value of less than 0.01 acts as a neon sign highlighting the statistical significance of this quirky correlation. Essentially, the likelihood of stumbling upon such a strong relationship by mere chance is about as probable as finding a statistical unicorn galloping through a realm of correlation coefficients.

Where does this leave us, you may ask? Our investigation sheds light on the delightful surprises that await those who venture into the terrain of scientific inquiry with a sprinkle of light-heartedness and an ounce of curiosity. While we may not have unraveled the ultimate mystery behind this whimsical association, our findings invite a chuckle and a smirk, serving as a testament to the serendipitous twists and turns that permeate the realm of statistical analysis.

In conclusion, our research paints a portrait of the charming fusion of rigorous investigation and levity, reminding us that science need not always be solemn but can also embrace the joyous dance of the unexpected. And as for future research in this area, we assert with a wink and a nod that no further inquiry is needed-after all, some mysteries are best left to the whimsy of statistical whims.

