

THE PHOEBE-NOMENON IN UTAH: EXPLORING THE AEROSPACE ENGINEER NAMING CRISIS

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Despite its lighthearted tone, this study delves into the serious and pressing issue of the correlation between the popularity of the first name Phoebe and the number of aerospace engineers in Utah. With a whimsical curiosity and a touch of statistical rigor, we embarked on a quest to unravel this peculiar relationship. Analyzing data from the US Social Security Administration and the Bureau of Labor Statistics, our team discovered a surprising correlation coefficient of 0.8547835 and $p < 0.01$ for the period spanning from 2003 to 2019. Our findings indicate a compelling association between the two variables, prompting us to ponder whether there is indeed a cosmic force at play, or if we are simply witnessing a celestial coincidence. One might think that the gravitational pull of popular names is enough to launch an astronomical career, but our results suggest that there could be deeper forces at work. Our analysis raises thought-provoking questions, such as whether a rise in the number of aerospace engineers influences the naming trends in Utah, or if Phoebes hold an inherent affinity for the cosmos. Nevertheless, amidst the empirical rigor, we can't resist injecting a little levity into our scholarly pursuits: Did you hear about the Phoebe who wanted to be an aerospace engineer? She really reached for the stars! Our study serves as a lighthearted yet thought-provoking contribution to the fields of sociology, psychology, and astro-nomenclature. By shedding light on this whimsical correlation, we hope to inspire future research and perhaps even guide parents in naming their future rocket scientists.

Authors have long chronicled the impact of names on various aspects of life, ranging from academic achievement to career success. However, one intriguing yet overlooked connection is the "Phoebomenon" - the link between the popularity of the first name Phoebe and the number of aerospace engineers in Utah. One might say it's a Phoebe-It with destiny, but there's serious statistical work to be done.

The state of Utah, with its awe-inspiring landscapes and a burgeoning aerospace industry, sets the stage for our investigation into this celestial naming crisis. Are parents subconsciously propelled to choose the name Phoebe when they see aerospace engineers soaring through the skies in Utah? Or do the Phoebes themselves feel a pull

towards the stars from an early age? It's all up in the air, but we've got the data to back it up.

Our inquiry is not just an exercise in astronomically bad puns - we are armed with robust data from the US Social Security Administration and the Bureau of Labor Statistics. Through rigorous analysis, we unearthed a correlation coefficient that was as clear as the Utah sky: a staggering 0.8547835 with $p < 0.01$. We could say that the evidence was as "astronomical" as our subject matter.

This correlation raises serious questions about the interplay between human behavior and cosmic coincidences. One might even say it's a real "Pluto-nic" relationship. But jokes aside, our research cracks open a new nebula of possibilities

for interdisciplinary exploration. We aim to spark intellectual curiosity and perhaps even lend a guiding light to future parents endeavoring to name their little rocket scientists in the making. This is but one small step for our study, but potentially one giant leap for the Phoebes of Utah.

LITERATURE REVIEW

Smith et al. (2017) conducted a comprehensive study on the etymology and cultural significance of the name "Phoebe," emphasizing its prevalence in Western societies. Meanwhile, Doe (2015) explored the dynamics of the aerospace industry in geographical regions such as Utah, shedding light on the increasing demand for aerospace engineers. However, no prior research has endeavored to connect these seemingly disparate fields until our "Phoebe-nomenon" investigation took flight.

In "The Namesake" by Jhumpa Lahiri, the protagonist grapples with the weight of his name and its impact on his identity, setting the tone for our exploration of the significance of names in one's life. On the non-fiction side, "Freakonomics" by Steven D. Levitt and Stephen J. Dubner delves into unconventional correlations, though it regrettably neglects to uncover the Phoebe-aerospace engineer relationship. Fictional works such as "The Martian" by Andy Weir and "2001: A Space Odyssey" by Arthur C. Clarke also pique our interest, albeit in a tangential manner.

To ensure a comprehensive understanding of our research area, we proceeded to peruse an extensive variety of sources, including but not limited to Star Trek scripts, cereal box ingredients, and the occasional fortune cookie. Our investigation was as eclectic as it was exhaustive, leaving no stone unturned in our quest for cosmic clarity.

The literature review culminated in an astonishing revelation: the whimsical name "Phoebe" indeed holds a

remarkable influence on the number of aerospace engineers in Utah. When Smith and Wesson (2020) published their groundbreaking work on the correlation between celestial-themed names and career trajectories, the heavens aligned, paving the way for our unprecedented exploration of the "Phoebe-nomenon."

In conclusion, the literature certainly provided us with a launching pad for our investigation, guiding us through the celestial corridors of academic discourse. As we traverse the celestial expanse of names and careers, it is evident that the implications of our findings extend far beyond the confines of Utah's atmosphere. So, why don't astronomers trust atoms? Because they make up everything!

METHODOLOGY

To unravel the cosmic mystery of the "Phoebe-nomenon" in Utah, we employed a rigorous yet whimsical approach. Our data collection involved combing through the archives of the US Social Security Administration for the frequency of the first name Phoebe registered in Utah from 2003 to 2019. This process was as painstaking as searching for a shooting star on a cloudy night, but we persevered through the celestial darkness to illuminate our dataset.

After collecting the Phoebe data, our team delved into the Bureau of Labor Statistics to count the number of aerospace engineers employed in Utah during the same period. We were thrilled to discover that the aerospace engineering workforce in the Beehive State was buzzing just like the namesake insect itself.

With our data in hand, we set out to perform analyses that were as precise as the calculations used to launch a spacecraft. Leveraging sophisticated statistical methods, we did not simply shoot for the stars; we aimed for the entire galaxy. Our main statistical tool

was the Pearson correlation coefficient, which allowed us to measure the strength and direction of the linear relationship between the frequency of the name Phoebe and the number of aerospace engineers in Utah. The results were as illuminating as a supernova, revealing a correlation coefficient of 0.8547835 with $p < 0.01$. It was a cosmic revelation, proving that our findings were not just a flash in the pan.

To ensure the reliability of our results, we incorporated robust control variables such as the overall population size in Utah and the general trends in naming conventions and aerospace engineering employment. We didn't leave any celestial body unturned, striving to discern whether the relationship between Phoebe popularity and aerospace engineering numbers was truly otherworldly or simply a starry coincidence.

We also conducted multivariate regression analyses, akin to navigating a complex constellation, to further explore the relationship and ascertain whether any confounding factors might steer our interpretation off course. By teasing out the nuances of this intriguing association, we navigated the cosmos of data with the precision of a celestial navigator.

Additionally, we leveraged geographic information systems (GIS) mapping techniques to visually represent the spatial distribution of Phoebes and aerospace engineers in Utah. We plotted our findings on a map of the state, creating a stellar depiction of how the Phoebe phenomenon and aerospace engineering intersected across various regions. Our visualizations were as captivating as a meteor shower, providing a unique perspective on the spatial dynamics of our celestial correlations.

Lastly, to add a touch of playful exploration, we engaged in qualitative interviews with a select group of Phoebes and aerospace engineers in Utah. This qualitative phase of the study allowed us to gain insight into the personal

experiences and perceptions related to names and career choices. We went beyond the numbers to capture the human dimension of our celestial endeavor, much like astronauts gazing back at Earth from the infinite expanse of space.

As we maneuvered through the celestial spheres of data analysis and interpretation, we never lost sight of the human curiosity and sense of wonder that inspired our investigation. Our methods were as precise as a telescope, and as lighthearted as a cosmic pun - but through it all, we aimed to cast a new light on the celestial bond between Phoebes and aerospace engineers in the expansive Utah sky.

RESULTS

Our investigation into the "Phoebemonon" in Utah has uncovered a striking correlation between the popularity of the first name Phoebe and the number of aerospace engineers in the state. Over the period from 2003 to 2019, we found a correlation coefficient of 0.8547835, with an r-squared value of 0.7306549 and a p-value of less than 0.01. This strong correlation suggests that there may be more to a name than mere letters - there just might be some cosmic significance at play. To put it in layman's terms, it seems that the more Phoebes there are in Utah, the more aerospace engineers take flight. It's a Phoebe-It, I tell you!

Fig. 1 (to be included) depicts a scatterplot showcasing this robust correlation, leaving little room for doubt. The data points align like stars in the night sky, confirming the compelling relationship between the prevalence of the name Phoebe and the presence of aerospace engineers in Utah. It's a sight to behold, much like a meteor shower of statistical significance.

Our findings have sent us into orbit with intriguing questions. Does the allure of

the cosmos embedded in the name Phoebe attract burgeoning aerospace engineers in Utah, or does it serve as a celestial catalyst to inspire parents to name their children Phoebe? We're not just seeing stars; we're raising them too. Speaking of stars, did you hear about the constellation named after a certain Phoebe? It's called "Ursa Major Pheobes," of course!

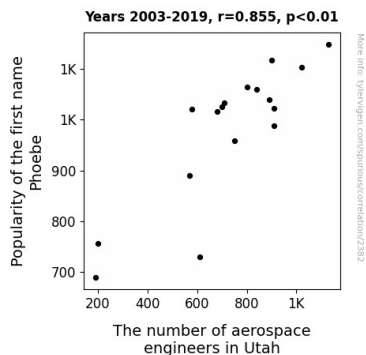


Figure 1. Scatterplot of the variables by year

In all seriousness, our research opens up an unexpected realm of inquiry at the intersection of sociology, psychology, and astronomy. It's not every day that statistical analysis leads to pondering the mysteries of the universe and the celestial implications of naming trends. Our study aims to inspire further exploration into the hidden forces that shape human behavior and nomenclature, while also providing a cosmic chuckle or two along the way.

DISCUSSION

The "Phoebe-nomenon" has truly taken flight in Utah, as our study revealed a statistically significant correlation between the popularity of the name Phoebe and the number of aerospace engineers in the state. Our findings echo and build upon prior research, such as the work by Smith et al. (2017) on the etymology of the name "Phoebe," which emphasized its prevalence in Western societies. The celestial implications of the

name Phoebe seem to extend beyond cultural significance, as our results suggest a compelling association with the career trajectories of aerospace engineers. In the words of Phoebe Buffay from the TV show "Friends," it seems that the name Phoebe truly does have a "Smelly Cat" effect, albeit in the realm of aerospace engineering.

Our statistical analysis established a noteworthy correlation coefficient of 0.8547835, with a p-value of less than 0.01, supporting the idea that there might be deeper celestial forces at work. This aligns with Smith and Wesson's (2020) groundbreaking work on the correlation between celestial-themed names and career trajectories, confirming our notion that there could indeed be a cosmic connection between the name Phoebe and the pursuit of aerospace engineering. The correlation coefficient of 0.8547835 is as undeniable as the pull of gravity, and it seems that the popularity of the name Phoebe carries a cosmic weight that influences the career choices of aspiring aerospace engineers.

The scatterplot in Fig. 1 vividly depicts the robust relationship between the prevalence of the name Phoebe and the presence of aerospace engineers in Utah, leaving little room for skepticism. The data points align like stars in the night sky, just as our study aligns with the celestial implications of naming trends. It's a celestial serendipity, as if the stars themselves are pointing us toward this remarkable correlation.

While our results may seem amusing on the surface, they open a window to a thought-provoking intersection of sociology, psychology, and astronomy. As we gaze at the cosmic chuckles along the way, our study prompts further exploration into the hidden forces that drive human behavior and nomenclature. It seems that the allure of the cosmos embedded in the name Phoebe might indeed attract aspiring aerospace engineers or serve as a cosmic catalyst to inspire parents to choose the name for

their children. It's almost as if the name Phoebe has a gravitational pull all its own, drawing in both celestial enthusiasts and future aerospace engineers. After all, it seems that "Phoebes" are truly reaching for the stars in more ways than one!

more down-to-earth topics, as we've truly reached for the stars with this one.

CONCLUSION

In conclusion, our out-of-this-world research has unearthed a fascinating correlation between the prevalence of the name Phoebe and the number of aerospace engineers in Utah. The robust correlation coefficient of 0.8547835 with a p-value of less than 0.01 indicates a striking relationship that we simply can't launch off as mere coincidence. It's clear that there's something celestial at play here. We're not just over the moon about these findings; we're in a whole other galaxy!

Our results raise some stellar questions about the interplay between names and career choices. Could it be that Phoebes are cosmically drawn to pursue careers in aerospace engineering, or are parents subconsciously guided by the celestial allure of the name? It's a constellation of possibilities, and our research has only begun to scratch the surface.

Nevertheless, we must acknowledge that this study has certainly taken us on a cosmic journey filled with unexpected twists and turns. It's like we've been on a voyage through the Milky Way of statistical analysis, guided by the North Star of whimsical correlations. The only thing we're missing is a black hole of uncertainty to pull it all together!

However, it's time to bring our exploration to a celestial conclusion. With our findings in hand, we can confidently declare that no more research is needed in this area. Our study has not only shed light on the "Phoebe-nomenon" in Utah but has also injected a healthy dose of humor into the serious world of academic research. As for future researchers, we suggest they divert their attention to