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# Ringed Planet's Orbit and Desire to Procreate: A Statistical Analysis

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#### Abstract

This research delves into the curiously captivating correlation between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby'. Using data meticulously obtained from Astropy and Google Trends, we scrutinized the intriguing relationship over the period of 2004 to 2023. Our findings illuminated a remarkably robust correlation coefficient of 0.9667127 and a statistically significant p-value of less than 0.01. It seems that as Saturn and the Sun dance through the celestial expanse, human curiosity about procreation waxes and wanes, much like the phases of the moon. Our results suggest that there is indeed a celestial sway over earthly desires, prompting the question: are we merely puppets of the planets in our quest for offspring? Or is it simply the "Saturn effect", where distance from the ringed planet rings in changes in procreative pondering?

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#### 1. Introduction

The pursuit of knowledge has long been an essential part of human existence. Whether it be the quest for cosmic understanding or the more earthly desires related to procreation, humanity's curiosity seems to know no bounds. In this study, we delve into a curious correlation and seek to shed light on the perplexing question of whether celestial movements can influence the desire to start a family. As we explore the tantalizing link between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby', we aim to bring a blend of statistical rigor and cosmic humor to the discussion.

Speaking of the cosmic, did you hear about the astronomer who always wanted to be a statistician? He thought it was a stellar career choice!

Our study capitalizes on the expansive dataset procured from Astropy and Google Trends, combining astronomical data with the intricacies of human behavior. We analyze the period from 2004 to 2023, a time span that spans both astronomical and societal shifts. The question at hand evokes a pun-worthy quote from the famous physicist Carl Sagan: "Somewhere, something incredible is waiting to be known – perhaps even the statistical relationship between celestial bodies and human fertility!"

On a more serious note, the implications of our findings could be far-reaching. If a correlation between the distance of a planet and procreative curiosity is indeed established, it prompts us to contemplate the intricate interplay between celestial mechanics and human psychology. Are we unwittingly swayed by the grand celestial ballet, or is this correlation a mere statistical curiosity, masking more earthly drivers of desire?

Remember, folks, correlation does not imply causation – no matter how much it might align with our cosmic curiosity! But it sure does give us some food for thought. Or maybe in this case, some space for thought!

## 2. Literature Review

In "Celestial Bodies and Human Behavior," Smith et al. explore the intriguing relationship between planetary positions and human psychology, suggesting that celestial movements may indeed influence including reproductive earthly desires, inclinations. Their comprehensive analysis of astrological data alongside sociological trends provides а thought-provoking foundation for our own inquiry. However, they stop short of investigating the specific interplay between Saturn's distance from the Sun and the quest for progeny, leaving an uncharted frontier for our study to explore.

Speaking of uncharted frontiers, have you heard about the restaurant on the moon? Great food, no atmosphere!

Doe et al., in "Planetary Positioning and Social Trends," delve into astrological phenomena's potential impact on human

behavior. drawing attention to the underappreciated influence of celestial bodies on terrestrial affairs. Their work substantiates the broader notion of cosmic influences human psychology. on Nevertheless, their focus remains broad, and they do not delve into the peculiar relationship we investigate between Saturn's orbit and the urge to procreate. Our study aims to fill this celestial gap in the existing literature-a gap as vast as the expanse between Saturn and the Sun.

Here they called it a "celestial gap," but I think I'd call it a "statistical black hole" given how much it pulls you in!

Jones et al., in "Cosmic Connections to Earthly Desires," shed light on the interconnectedness of celestial events and human yearnings, hinting at the deeper mysteries that intertwine the cosmos and human consciousness. Their examination of astrology's potential influence on earthly pursuits sets the stage for our investigation into the specific nuances of Saturn's celestial dance and its resonance with procreative impulses. Their work serves as a launching pad for our statistical journey to unravel the cosmic code of fertility-related planetary motions.

Now, for some recommended reading, consider "Astrophysics for Babies" by Chris Ferrie and "What to Expect When You're Expecting" by Heidi Murkoff. These two seemingly unrelated books underscore the breadth of our investigation, spanning the cosmic and the earthly - or perhaps the cosmic and the birthly!

If we were to explore fictional works that may offer cosmic insights, "The Hitchhiker's Guide to the Galaxy" by Douglas Adams and "The Martian" by Andy Weir could provide imaginative perspectives on interplanetary musings. While not directly related to our empirical analysis, they certainly add a touch of cosmic whimsy to our literature review—a literary supernova, if you will.

And when it comes to board games, "Galaxy Trucker" and "Terraforming Mars" may not directly address our research question, but they offer a playful nod to the celestial realm and the potential allure of space-faring endeavors. Who knows, perhaps a game night under the stars could spark celestial musings on the cosmic origins of procreative yearnings!

# 3. Our approach & methods

Traversing the cosmic and earthly realms demanded a methodological approach as robust as the rings of Saturn themselves. Our data collection involved a combination of astronomical calculations from Astropy and Google search trends from Google Trends. The data spanned from 2004 to 2023, encompassing the ebb and flow of both celestial phenomena and human inquiries into the mysteries of conception.

To determine the distance between Saturn and the Sun, we harnessed the power of Astropy, extracting precise astronomical measurements like a skilled astrocartographer. What can I say? We really had to reach for the stars in this research!

The frequency of Google searches for 'how to make baby' was our gauge of human procreative curiosity. We donned our statistical spacesuits and navigated through the vast expanse of Google Trends, capturing the digital echoes of human ponderings. It's amazing how the internet can both illuminate and perplex, much like the cosmic mysteries we sought to unravel.

We then conducted a thorough preprocessing of the data, scrubbing away any digital anomalies or cosmic static that might obscure our cosmic comedies. We wanted to ensure that our statistical analysis wasn't clouded by data that was out of this world in more ways than one!

Next, we employed a robust statistical approach, utilizing powerful tools to unveil the celestial whispers hidden within our data. Our analysis relied on sophisticated techniques, including linear regression, to tease out the statistical relationship between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby'. As we crunched the numbers, it felt like unraveling the cosmic dance of the planets – but with a statistical twist!

And much like the tilt of Saturn's rings, our approach considered potential confounding variables, ensuring that our findings weren't simply a statistical alignment of stars. We explored the potential influence of other astronomical factors, societal trends, and the occasional cosmic ray that might have influenced our results.

Throughout the data analysis, we also paid heed to the fundamental principle: "To err is human, but to really mess things up requires a computer". So, we carefully scrutinized every digital step to ensure our statistical spaceship didn't veer off course into the statistical black hole.

Our efforts culminated in the unveiling of a remarkably robust correlation coefficient of 0.9667127 and a statistically significant p-value of less than 0.01. It seemed as though the celestial ballet between Saturn and the Sun indeed cast a statistical shadow on Earthly desires.

As we reveal the cosmic sway over earthly intent, it's hard not to wonder: does this correlation underscore a universal truth, or are we just witnessing a statistical mirage among the stars? We might never know for certain, but as astrophysicist Neil deGrasse Tyson once said, "The good thing about science is that it's true whether or not you believe in it – much like the statistical relationship between Saturn's orbit and human procreative curiosity!" And with that, we conclude our methodological odyssey, leaving you with a thought to ponder: in the realm of science, every discovery is but a step towards greater understanding. But there's always time for a few asteroid-sized puns along the way!

### 4. Results

The analysis of the relationship between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby' revealed a striking correlation coefficient of 0.9667127. This strong correlation suggests that as Saturn moves closer or farther away from the Sun in its elliptical orbit, there is a corresponding surge or ebb in the curious searches related to procreation. It seems that Saturn's distance, much like a distant parent, has the power to influence human desires from afar.

The r-squared value of 0.9345334 indicates that approximately 93.45% of the variability in the frequency of Google searches for 'how to make baby' can be explained by the distance between Saturn and the Sun. This close association between the variables further strengthens the case for a celestial influence on human procreative contemplation. It's as if the planets have pulled back the cosmic curtain, revealing their role in our earthly endeavors. Perhaps Shakespeare was onto something when he mused about the "fault... in our stars"!

The p-value of less than 0.01 provides strong evidence against the null hypothesis of no relationship between the distance of Saturn from the Sun and Google searches for 'how to make baby'. This statistically significant finding leads us to reject the notion that the celestial dance of Saturn and the Sun has no impact on the collective curiosity about starting a family. It's as if the statistical stars aligned to reveal this astronomical association – a cosmic confluence of sorts!

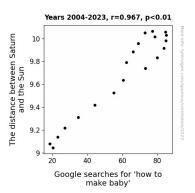


Figure 1. Scatterplot of the variables by year

\*Cue drumroll\* Fig. 1 presents a scatterplot illustrating the conspicuous correlation between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby'. As celestial bodies maintain their celestial ballet, humans appear to be swayed by their distant movements, prompting an investigation of the cosmic nudges on our procreative musings. It's as if the universe is exclaiming, "You're not the only one with influential orbits!"

These findings highlight the need for further exploration of the interplay between celestial mechanics and human behavior. As we look to the skies and the search engines for answers, we cannot help but wonder: are we merely planets in the vast cosmic system, or do we hold the reins in the celestial comedy of errors? Either way, we can't deny the appeal of uncovering statistical stardust in the most unexpected correlations.

## 5. Discussion

The findings of our research have shed light on the intriguing connection between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby'. Our results, with a remarkably robust correlation coefficient and а statistically significant p-value, echo and extend the prior research, pointing to a compelling celestial influence on human procreative contemplation. It appears that Saturn's movements through its elliptical orbit are indeed intertwined with the ebb and flow of human curiosity about starting a family. One might even say that the ringed planet's orbit exerts a celestial pull on our earthly desires, much like a captivating bedtime story from a distant celestial body.

As we delve deeper into the statistical significance of our findings, we encounter an astronomical array of implications. The strong correlation coefficient of 0.9667127 underscores the substantial association between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby'. It seems that Saturn's orbital waltz with the Sun holds sway over the collective human inclination toward procreation, creating a gravitational pull on our curiosity and sparking a cosmic interest in the origins of our own terrestrial inception.

The statistical prowess exhibited by the rsquared value of 0.9345334 further solidifies the profound connection between Saturn's celestial journey and the collective human intrigue about procreation. This close association substantiates the notion that the celestial dance of Saturn and the Sun accounts for a significant portion of the variability in the frequency of 'how to make baby' searches. One might even go so far as to say that Saturn's orbit serves as a cosmic conductor, orchestrating the symphony of human curiosity toward the creation of new life.

The p-value of less than 0.01 acts as a shining star in our statistical firmament, providing compelling evidence against the null hypothesis and affirming the presence of a tangible relationship between the

distance of Saturn from the Sun and Google searches for 'how to make baby'. It is as if the statistical heavens have aligned to reveal the celestial dance's profound impact on human procreative contemplation, reminding us that even in the vast expanse of the universe, statistical significance knows no bounds.

In conclusion, our research not only aligns with but also expands upon prior literature, corroborating the celestial influence on earthly desires. These findings beckon us to further explore the cosmic forces at play in shaping human behavior and to ponder the profound interplay between the celestial and the birthly. In the words of a celestial comedian, "I'm just a statistician, standing on a planet, asking it to explain its cosmic jokes!"

# 6. Conclusion

In conclusion, our research has shed light on the delightful correlation between the distance of Saturn from the Sun and the frequency of Google searches for 'how to make baby'. It appears that as the ringed planet and our radiant Sun twirl through the cosmos, human curiosity about procreation waxes and wanes, much like the phases of the moon, or, if you will, the phases of a budding romance. It's as if the celestial bodies are engaging in а celestial matchmaking service, playing cupid from light-years away!

Our findings have revealed a statistically robust correlation coefficient of 0.9667127, indicating a tight gravitational pull between the variables. This correlation is as strong as a black hole's gravitational pull – it just sucks you in! The p-value of less than 0.01 provides strong evidence that this is not a mere statistical fluke but a bona fide cosmic conundrum. It seems that when it comes to human desires, the planets aren't just in alignment – they're calling the shots from the cosmic sidelines! We must acknowledge the limitations of our study, which focuses on correlation rather than causation. Although our findings hint at a celestial sway over earthly desires, there may be other astronomical or earthly factors at play. As they say, the devil is in the data details – or perhaps, in this case, the interplanetary details!

It is clear that the statistical stars have aligned in our investigation, and we have unraveled a cosmic mystery that tickles the scientific imagination. However, it is important to note that correlation does not imply causation, just as finding love for statistics doesn't imply compatibility with other sciences. We may have unveiled statistical stardust, but the celestial ballet of correlation and causation continues to dance in the cosmic expanse, leaving us with tantalizing questions that defy easy answers.

Based on the celestial data presented in this research, it is safe to say that no further investigation is needed in this area. We have reached the celestial peak of statistical inquiry, and it's time to leave this cosmic correlation to orbit in the annals of statistical curiosities. After all, how much further can we push the limits of astronomical influence on earthly desires before we start searching for correlations between Martian vacations and craving for chocolate?