# Is there a Correlation between a Corona Resident's Big Three Zodiac Signs and their Experiences of Bodily Pain and/or Medical Complications?

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## ABSTRACT

The objective of this study was to explore the correlation between astrology and fields of medicine to predict medical complications and regions of severe pain for future patients based on their big three zodiac signs. Past research has indicated that astrology has played a minor role in psychological analysis, however, this study aims to test that correlation by taking into consideration one's sun, moon, and rising sign (big three). Based on the review of the literature comparing astrological studies in topics of education, psychology, economics, and medicine, an online google form survey was distributed to residents of Corona, California from all age groups. Respondents were required to fill out Informed Consent documents, report their big three zodiac signs based on the website provided (typing in their birthdate, birth time, and birth location), and include any history of medical complications and/or pain. After analyzing the 116 respondents that took my survey, it was clear that a correlation did exist with the following zodiac signs when holistically looking at all the medical complications and big three zodiac placements: Virgo, Scorpio, Capricorn, Leo, Cancer, and Saggitarius. The results concluded that there is a correlation between one's big three zodiac signs and their history of medical complications and/or pain. On this basis, it is recommended to also take into consideration limiting factors like sample size, confirmation bias, nonresponse bias, and lack of age group variability. Further research and practical implications of astrology, such as experimental designs, are necessary to challenge its label as pseudoscience.

## Introduction

The mysteries surrounding different types of pseudoscience states that it is "a collection of beliefs or practices mistakenly regarded as being based on scientific method." One pseudoscience, in particular, explores the intersection between celestial bodies (Sun, Moon, Solar System planets, and stars) and human affairs within our Earthly world. Astrology has been around in civilizations such as the Babylonians, Sumerians, Ancient Greece, and Ancient Rome where astrology was employed as a tool for mapping and understanding the stars and planets to predict natural disasters, changes in agriculture, and weather patterns. Its once eons of archaic practicality have segued to being utilized as a form of character analysis amongst teenagers through modern ages of pop culture and for scientists to debate its "magic" in medicine and other relevant career paths (AstroTwins, 2020).

There are 12 zodiac signs: Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Saggitarius, Capricorn, Aquarius, and Pisces, each playing a role in one's birth/natal chart. These charts are a map of where all the planets in the solar system were located in their journey around the Sun at the exact point a person was born, with Earth being the vantage point of calculation. It can reveal one's strengths or weaknesses, along with insightful details about one's personality (AstroTwins, 2020). My research study will focus on the scope of people's big three zodiac signs from their natal chart in the city of Corona, California, and will contain all age groups to take into account a variety of

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medical complications that will be collected. The big three zodiac signs comprise one's sun sign: the main zodiac sign that describes your purpose and inner journey, one's rising/ascendant sign: a social mask on how they perceive themselves to others, and one's moon sign: their emotional landscape detailing how they share their emotions with others. These factors can be known from one's birthday, birth time, and birth location (Hocking, 2019).

With medicine becoming more difficult in finding cures to potential future diseases and astrology's popularity increasing amongst social media and the humanities, it is necessary to potentially take into consideration of Astromedicine to challenge the theoretical problem of predicting a patient's medical complication(s). While much research has been done on astrology's conducive tangibility to medicine (Wyman & Vyse, 2008; Austin, Mamdani, Juurlink, & Hux, 2006), they fail to consider one's big three zodiac signs to make the data collection process more accurate for finding correlations.

Hence, my research question will be tested with a correlational research approach by collecting data on one's big three zodiac signs and their history of medical complications/pain utilizing a google survey form. My dissertation contains sections of the literature review, methodology, results, and discussion portions. The review of the literature further explores past research studies on astrology to set up the reasoning for my methodology portion, delving deeper into the description of my survey along with a list of steps when constructing the data collection on astrology. This segues into the results where the findings and data analysis highlights important correlations that were noted from the study, and the discussion section finalized my research paper, including any limitations, implications, future research, and concluding thoughts on Astro-medicine.

## **Literature Review**

#### Introduction to Astrology

Pseudoscience, fake religion, astrology has taken on a multitude of different names, becoming a topic of controversy that bustles through the minds of many believers and non-believers alike. In the following review of the literature, astrology will be first introduced through a historical lens, segueing into modern research techniques utilized to test its potential truth, and finalized into possible implications of astrology in society regarding its tangibility in multiple areas of life.

#### Historical Background of Astrology

Author William Lilly discusses the history of astrology and how compatibility determines one's future illnesses. In his book, Lilly illustrates the importance of each planet in astrology as time has progressed for thousands of years. Astrology has been made a good predecessor of future events based on the alignments of the moon and surrounding planets (Lilly, 1835). This source not only comes from a non-profit, educational-based website but the author of this book is an expert in his field since he is an English astrologer from the 1800s. This is also the case for two Harvard Professors who attempt to form a connection between astrology and astronomy to predict future stars and planetary positions. This article states that humans are instead part of the spiritual universe rather than being separate from it as we play important roles in the cosmos of the universe (Stevens, 1986).

If astronomists and astrologists collaborated, newfound knowledge can facilitate academic growth on both sides of the profession to help bolster astrology's credibility. D'Evelyn posits a similar idea where she explains the difference between Eastern astrology and Western astrology; Western astrology is often overlooked by scientists until people tracked the historical record of political usage of astrology (D'Evelyn, 1988). Astrology makes the idea of one's fate and death seem less appallingly negative while also proving that human affairs throughout history occur during major retrogrades of certain planets. Similar to the rest of the historical sources stated earlier, it is a peer-reviewed scholarly journal that has been reviewed by astrologists and planetary astronomers.



#### Modern Research of Astrology

Astrological studies were performed through both quantitative and qualitative research perspectives to gather different points of view. Scientists host multiple surveys that test people's confirmation bias on topics like astrology; correlations were formed between one's demographic background, sex, race, and age group when behavioral accusations were accounted for in the data collected on people's sun, rising, and moon sign (Hergovich, Schott, & Burger, 2010). Wyman and Vyse had similar ideas to the earlier scientific studies but their results differed significantly from the confirmation bias data.

In their research study, 52 people were chosen, exploring the relationship between astrology and the psychological analysis of one's personality. In this case, there was little correlation between the astrology component of introversion and extroversion, illustrating that people's personalities were more accurate based on the psychological analysis constructed by cognitive psychologists (Wyman & Vyse, 2008). Epidemiologists conducted a similar study but rather on a more grand scale with 10.5 million people: medical records were examined with the zodiac sign of each patient. There was a found correlation between certain zodiac signs and an increased chance of specific diseases, while there was also a random correlation amongst other zodiac signs where diseases couldn't be predicted (Austin, Mamdani, Juurlink, & Hux, 2006).

Mowen and Carlson share similar results to that of the epidemiologists except they utilized qualitative research data from the hierarchical background of superstitions such as magical, supernatural, and astrological elements. Individuals were surveyed and it was found that those who hold these superstitions could have negative tendencies and make poor decisions that lead to a futuristic lifestyle. Compared to the other studies, Mowen and Carlson found downsides in supernatural ideologies due to their own biases in astrological research (Mowen & Carlson, 2003). These past sources were all organized with research methodology being conducted first along with data and future limitations following it after.

#### Future Research of Astrology

Kaplan utilizes information found from a qualitative research study to predict future STEM majors based on one's belief in pseudoscience. A simple random sample of educators' viewpoints on astrology was analyzed concerning their designated field of science and degree of education. Most teachers and educators believed astrology to be a legitimate science, adding to its potential truth in the STEM field (Kaplan, 2014). Astrology was considered through different astronomical lenses and data was gathered regarding the opinions of astrology being considered a science rather than pseudoscience from educators. Similar to these educator's opinions on astrology, evolutionary astrologist Adam Weisner concurs with them by sharing their perspective on how evolutionary astrology has allowed them to reflect on their practices in autoethnography- a type of qualitative writing method to reflect on one's feelings (Weisner, 2020).

Scientists in this field of astrology believe that this form of study could be a breakthrough in therapeutic and self-healing practices. Parallels were drawn from Weisner's approach of astrology to that of Elisha's larger scale comparison of the zodiac to pandemics, in particular, COVID-19. When there are major planetary shifts, there are bound to be issues like war, disparity, and pandemics like COVID-19, therefore astrology was once again a correct predictor of catastrophic events (Elisha, 2020). This source was published by the Social Science Research Council and they're a non-profit organization that mobilizes necessary knowledge for the public by supporting scholars in their fields of expertise as well as researchers in policymaking; by working with experts in the field of articles, it helps increase the credibility of their information while highlighting misinterpretations in astrological research.

#### Conclusive Thoughts of Astrology

Whether or not one agrees with the thresholds of astrology, it will be a topic that will forever linger in the smaller and larger scales of society regarding politics, medicine, business, and psychology. After reviewing the different types of research methods along with their results, it is clear that there wasn't an exact answer nor exact disapproval of the



data, therefore astrology needs to be researched more thoroughly and be practiced more tangibly. In my quantitative research study, I plan to take into consideration ones "big three zodiacs" which comprises the sun sign: a person's main zodiac that describes one's purpose and inner journey, the rising/ascendant sign: a person's social mask and how others perceive them, and the moon sign: a person's emotional landscape and how they share their emotions with others. These factors can be known from one's birthday, time of birth, and location of birth which also shapes the natal chart: a map of where all the planets in the solar system were located in their journey around the Sun at the exact point a person was born. The review of the literature provided a wide range of perspectives, but the main issue that arises is that not enough researchers take into account one's natal chart rather than their one zodiac sign, therefore yielding gaps in future, repetitive studies. My study aims in answering the question of if there is a correlation between one's big three zodiac signs and one's experiences of bodily pain and/or medical complications.

## Methodology

#### Survey Sample

In past astrological studies, surveys have become exemplars of quantitative data collection due to their efficiency and multi-faceted usage. From gathering numerical information regarding the number of people involved in a study to its diverse questionnaire options on the multiple-choice, free response, and select-all options, surveys offer the intersectionality between quantitative and qualitative data collection. To fully explore the implications of astrology in modern-day medicine, one must consider this form of data gathering, to obtain the quantitative data necessary. A survey is beneficial for the populace of Corona because it can be easily sent out to multiple communities from different age groups who wish to participate in this study; the full survey can be seen in the appendix of my research paper.

Having different age groups allows for more accurate data since older groups tend to have a larger history of medical complications in comparison to younger generations. If I limited my survey to only high schoolers, my data would pale in significance since there is an unlikely chance that everyone surveyed had a medical background of issues. Surveys can also be shared simultaneously and do not have to be a tangible form that people have to fill out, therefore making it more accessible to online communities. In the modern, technological age, communication has become more prevalent than ever and it seems that social media can be advantageous in sharing information that is considered inaccessible to others. My study closed that gap in making astrological information a ubiquitous subject, becoming easily accessible to residents of Corona.

One issue in this study is that some people did not know their birth time or birth location which became a large limiting factor in the versatility of this survey. Although this hinders some people from understanding their big three zodiac signs (sun, moon, and rising), Corona consists of over 160,000 residents so I did not underestimate the availability of subjects who are cognizant of such information. The survey also enables the input of websites and links, allowing residents to access the Cafe Astrology website where they easily inputted the information I required without compromising their anonymity. Astrology and one's medical history play a large role in shaping a person's background; this type of information is sensitive in that it can expose a person's flaws, strengths, or potential insecurities.

Whether or not a person believes in astrology, they must remain anonymous when reporting not only their astrological information but their medical information as well since it encapsulates a person's universal background identity. Surveys entrench the idea of safety, enabling this possibility of data gathering, therefore making it a viable method of collecting personal information without exposing the identity of a person.

#### Data Collection

My survey consisted of four different sections where my subjects were able to respond. The first section consisted of a quick debrief of the purpose of my study, regarding how astrology has become an increasingly popular tool in pop culture; although its popularity has increased amongst younger and older populaces, it still needs to be further researched to solidify its place as a science rather than pseudoscience. You want to make sure to not only state the

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purpose of your study but also include your personal information such as your name, high school, grade level, and city along with the research class that you are partaking in. I attached two informed consent files in the first part of my survey where Corona residents were able to review and confirm they were given consent to participate based on if they were 18 and over or under 18. One form was for residents that were under 18 and the other form was for residents to simply click on their designated-age consent form where they agreed that they can participate in the study.

After completing the first part of the survey, Corona residents segued to the penultimate "Astrological Questions" section where they began filling out their astrological information. Since most people do not know their big three zodiac signs, I included a website above (cafeastrology.com) where I gave the following directions: after visiting the website, input your name, pronouns, birth time, birth date, and birth location; below the birth location inputter, you will see a submit button which will prompt you to your results; once you clicked the submit button, scroll down until you see your natal chart where you will copy and paste your sun, moon, and rising sign into the survey. I wanted to include the website rather than have them input their birth time, birth date, and birth location in the google form since that is personal information. If the user already knew their sun, rising, and moon sign then they do not have to visit the website and instead just input that information in the designated areas. I proceeded to include an example on the survey where Corona residents were able to see which parts of the natal chart I needed to have on record on the survey. Once the participants input their sun, rising, and moon sign into the google form, they will click the "next" button.

The last part of the survey is the "Medical History" section where Corona residents were able to include their history of pain and/or medical complications. Unfortunately, similar to the lack of knowledge about one's birth time and birth location, if a person does not know or have a history of medical issues then it can isolate certain individuals from participating. Due to the vast population of Corona and the unlikeliness of this situation, I was still able to collect a large amount of data regardless of the limitations this lack of medical history provided. Each zodiac sign rules different parts of the body so for each checkbox I listed the areas for each sign. For example, in the first checkbox, I listed "Head, Brain, or Face" which are the areas ruled by Aries, and in the next checkbox, I listed the areas ruled by Taurus and continued that process for all the zodiac signs. Most of the participants don't know what body parts the zodiac signs rule, therefore diminishing participant bias when selecting which areas they have had pain or complications in. The participants can select as many options as possible and they do not have to confirm the one body part they have had issues in since there are a couple listed for each checkbox. One issue is that some residents could lie about where they have had medical issues or even be cognizant of the body parts each sign is ruled by, but in my informed consent, I made sure to specify to answer "truthfully to the best of your ability."

After participants selected their checkboxes of wherever they experience medical complications, they clicked next on to the last section of the google form survey. I labeled this section as questions, comments, and concerns where I included my email to reemphasize the importance of communication to reach out to me with any of their inquiries. This section also included a brief appreciation to the participants for partaking in my study where they then clicked "submit", finalizing the results of my survey.

## Results

#### Findings

A stacked bar graph was utilized to help visualize the data since it gives options for including more than two factors compared to a simple bar or line graph where only X and Y variables are included. The three factors in the stacked bar graph chart include each zodiac sign, types of medical complications, and the number of people that have had a said medical complication/pain. Four stacked bar charts were constructed, one for the sun, moon, rising, and overall big three zodiac signs to simplify the complex data.



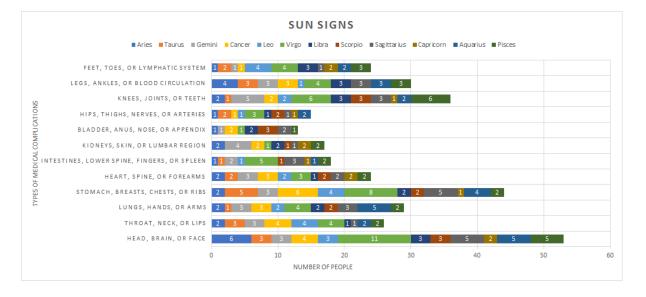


Figure 1. Stacked Bar Chart Between Sun Signs and Medical Complications/Pain. Legend Includes List of Zodiac Signs

In figure 1, one can scrutinize each section of medical complications and how many of each sun sign fit in each bar based on how many people have had a certain medical complication/pain. The majority of people who had medical complications and/or pain in the head, stomach/breasts, intestines/lower spine, and hips/thighs region have Virgo as their sun sign. This already contradicts the original correlation that the head/brain region is ruled by Aries, therefore Aries should have been the majority sun sign if that correlation was correct. The majority of people who had medical complications in the lungs/hands region have a Libra sun; the majority of people with medical complications in sexual reproduction have a Scorpio sun sign. Finalizing the data of the sun sign stacked bar graph indicated that Scorpio and Virgo had the correct correlation to the part of the body they rule, meaning the majority of people with a Scorpio sun sign, for example, have medical complications in the sexual reproductive system, the area that sign rules. One thing to be noted is that certain body regions such as the throat, heart/spine, knees, legs, and lymphatic system/feet had majority ties between more than one zodiac sign.



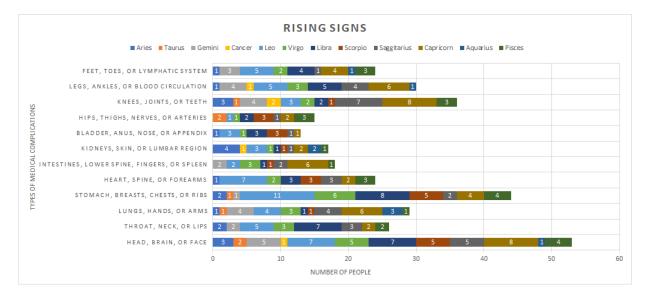


Figure 2. Stacked Bar Chart Between Rising Signs and Medical Complications/Pain. Legend Includes List of Zodiac Signs

Figure 2 focuses on the rising signs. The majority of people who had medical complications in the head, lungs/hands, intestines/lower spine, knees, and legs have a Capricorn rising sign. The majority of people who had medical complications in the throat have a Libra rising; and the majority of people who had medical complications in the stom-ach/breasts, heart, and feet/lymphatic region have a Leo rising. Aries risings also held the majority of people with medical issues in the kidney/lumbar region. There was a tie for the majority between multiple rising signs for a single medical complication. Leo, Scorpio, and Capricorn risings had the correct correlation to the part of the body they rule.

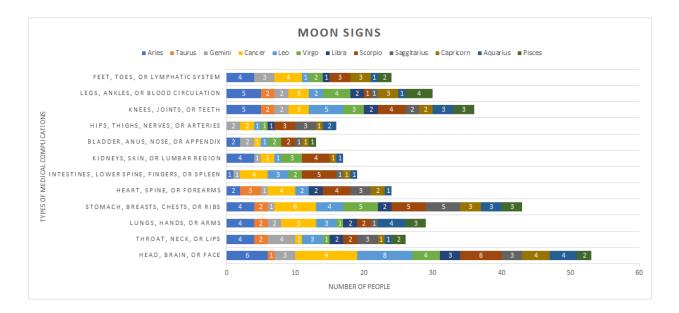


Figure 3. Stacked Bar Chart Between Moon Signs and Medical Complications/Pain. Legend Includes List of Zodiac Signs



Figure 3 identifies the same relationship as previous graphs except with the moon signs. The majority of people with medical complications in the head, lungs/hands, and stomach/breasts have a Cancer moon. The majority of people with medical complications in the intestines/lower spine have a Scorpio moon. In this graph, there were over 10 medical complications that had ties for the majority between multiple moon signs as seen in the data above. When taking into consideration the majorities and ties, moon signs in Cancer, Scorpio, and Saggitarius had the correct correlation to the body part they rule.

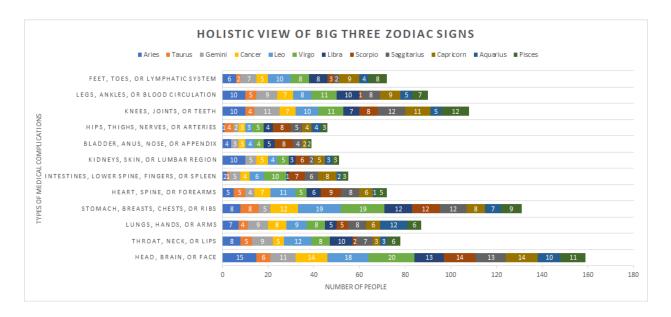


Figure 4. Stacked Bar Chart Between Big Three Zodiac Signs and Medical Complications/Pain. Legend Includes List of Zodiac Signs

The last graph (Figure 4) looks at all of the zodiac placements (sun, moon, and rising) holistically, to take into consideration any patterns that arise when combining all three graphs. The majority of people with medical complications in the head, intestines/lower spine, and legs have a Virgo placement, regardless if the placement is in the sun, moon, or rising sign since the graph looks at the total amount of Virgos overall. The majority of people with medical complications in the throat, heart, and feet/lymphatic system have a Leo placement; the majority of people with medical complications in the lungs/hands have a Libra placement; the majority of people with medical complications in the kidneys/lumbar region have an Aries placement, and the majority of people with medical complications in the sexual reproductive system and hips/thighs have a Scorpio placement. As mentioned previously, there was a tie for the majority zodiac sign between multiple zodiac signs, in each type of medical complication. Leo, Virgo, and Scorpio placements had the correct correlation to the body part they rule, and when looking at all 4 graphs overall, Cancer, Leo, Virgo, Scorpio, Saggitarius, and Capricorn correlated correctly to their said body part, hence over half of the zodiac signs (6 out of the 12 zodiac signs) had a positive correlation.

#### Data Analysis

Circling back to the original research hypothesis, my correlational research study aimed to investigate the relationship between astrology and medicine through the use of google forms, astrology websites, and stacked bar charts. The results of the study indicated that some zodiac signs, such as Scorpio, were consistently high with correlations to their designated body region across all the sun, moon, and rising sign placements. Overall, correlations

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existed in each stacked bar chart and there were repetitive ties for the majority of each type of medical complication, suggesting that there was a small margin of error for certain zodiac sign placements.

The premise that 6 zodiac signs, regardless of their placement in one's natal chart, had a high correlation of medical issues to their designated body part, aids in building a foundation for answering my research question. Even though not all the zodiac signs had a strong correlation, there is a partial "yes" answer to my original hypothesis stating if there is a correlation between one's big three zodiac signs and their experiences of bodily pain and/or medical complications. An interesting pattern I found with the moon sign placements is that Cancer either held the majority or was tied for the majority in almost half of the medical complications. This proposes that people who have their moon sign in Cancer will have a higher chance of garnering medical issues, no matter which part of the body it is. Another aspect to point out is that Cancer is ruled by the moon so even though my hypothesis does not address this, it is not a coincidence that people with Cancer moons had amplified effects on their medical conditions. When comparing the sun, moon, and rising sign graphs I also noticed that medical complications in the head, stomach, and joints region were most common for all the individuals who participated in my study.

In general, Aries, Virgo, Cancer, Leo, and Scorpio held the majority for having the most medical complications in all body areas, whether or not they had a correct correlation to their designated body region. My hypothesis was supported by Cancer, Leo, Virgo, Scorpio, Saggitarius, and Capricorn placements since they had the highest correlation to the body region they rule; even though Aries, Taurus, Gemini, Libra, Aquarius, and Pisces did not correlate correctly, one must consider that there was little difference between the X and Y variables for these signs. For example, if one recognizes the throat, neck, and lips Y variables on the sun signs region, Cancer, Leo, and Virgo was the majority with 4 people, while Taurus had 3 people, therefore mathematically stating there was a difference between the majority (Cancer, Leo, and Virgo) and the 2nd majority (Taurus and Gemini) for that placement and others for that matter. This neither supports nor goes against my hypothesis but rather fills in a gap to address reasons why certain zodiac sign placements did not hold the majority in their correct body region.

## Discussion

#### Implications

My research study agrees with previous studies exploring Astro-medicine such as the group of epidemiologists who decided to survey over a million people and gather medical records and zodiac signs of these patients, finding more than half of the zodiac signs correlating to the body region they rule (Austin, Mamdani, Juurlink, & Hux, 2006). What differs is that the epidemiologists only focused on people's main zodiac sign (sun sign) and mine focused on people's big three zodiac signs, therefore making it more accurate. Psychological studies coupled with astrology, found little to no correlation when attempting to form a relationship between psychological concepts of introversion/extraversion and zodiac signs (Wyman and Vyse, 2008). These psychologists found some notable trends such as the fire signs being more extroverted, but there were barely any correlations, consequently disagreeing with my study since extraversion/introversion does not play a role in astrological research.

Finding a correlation between astrology and medicine for over half of the zodiac signs in my study prompts new insight for fields of Astro-medicine and aided in filling gaps where previous astrologists, astrophysicists, psychologists, etc... failed to consider since they only looked at one zodiac sign placement (the sun). This warrants further investigation of medical research practitioners who wish to survey patients about their natal chart before conducting a full physical examination to possibly predict which parts of their body they should be more cognizant about based on their big three or even big six zodiac signs (big six includes sun, moon, rising, mercury, venus, and mars sign). Being able to predict future medical complications based on one's natal chart can make breakthroughs in doctors' medical practices and viewpoints of Western medicine.

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If my methodology was repeated for individuals practicing in the field of psychology, it can provide clarity on how to approach the diagnosis of a patient undergoing mental illness due to having an understanding of their natal chart because not every patient can be treated the same. Since my study considered three zodiac placements rather than one, it can elicit further speculation and research on astrology's label as a pseudoscience since most scientists do not know that everyone has a zodiac sign in each planet of the solar system that influences personality from a medicinal and psychological perspective.

# Limitations

Throughout the design of my research study, some impediments could have hindered the accuracy and efficiency of my results. My sample size consisted of one hundred sixteen people which is a very small fraction of the actual population size of Corona (170,000 people), therefore limiting the broadness of my data gathering process. Although this may be the case, I do not have the resources necessary as a high school student to reach even a quarter of Corona's population which justifies my sample size. The majority of my responses were from a younger population that tends to not have a large history of medical complications, presenting few diverse responses and voiding around eleven responses that had no medical complications listed since they would not provide insight into a potential correlation where no medical issue exists.

In my research question, I included the phrase "pain" to take into account for people who may not have diagnosed medical issues. The vague term "pain" resulted in my study having a spike of responses for the head/brain/face and joints region because headaches and soreness are common amongst the American populace and specifying what counts as severe pain could have limited the influx of responses for those body regions. My survey could have encountered confirmation bias since individuals may already know about the correlation between certain body regions and the zodiac sign that rules it. This could make my study more accurate, however, it would then have fabricated data that would not contribute correctly to the scientific discussion.

Some people dislike astrology for religious purposes or are not aware of their birth time and birth location, segueing to nonresponse bias. This may have led to a decrease in the number of responses I could gather, therefore increasing variability in my small sample size. The most important idea to distinguish in my research design is that correlation does not imply causation; due to time constraints, a correlational research study was needed, however, for my study to truly imply a relationship between astrology and medicine, one would need to conduct an experimental design. It is beyond the scope of my study to address the truth of Astro-medicine, however, given these restrictions, my study aimed at adding to the controversial discussion of astrology being labeled as pseudoscience due to my holistic overview of the big three zodiac signs and the appropriate methodology for my demographics.

# **Future Research**

To address these limitations with future research studies that wish to explore Astro-medicine's parameters, one should widen the scope of their data sample. My study was limited to the population of Corona rather than Riverside County, therefore a larger sample size is necessary for reducing variability in responses. Scientists should see if specific locations like Los Angeles County play a factor in these studies because you will most likely have a higher number of people responding for lung medical complications due to high pollution in condensed, urban areas. Abiotic factors such as environmental hazards cannot be controlled, to a certain extent, consequently, experiments should be implemented rather than correlational research studies to imply causation between astrology and medicine.

Aside from more studies needing to be conducted to analyze the pseudoscience label that astrology was given, researchers should define what counts as "pain" and certain medical complications. This is vital to the accuracy of the results of the methodology portion because if, for example, someone has a bruise on their elbow, the participant could maybe say this is a "medical complication" or "pain" in the arm region; the issue with these data responses is that now

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and then, people can get bruises or headaches, therefore evidence of a medical diagnosis in specific parts of the body will be necessary for producing a niche methodology section.

Older populations should also be a parameter for future research because the majority of my demographic area was a young audience due to interference from factors of high school and social media that tailor to students. Individuals from older populations tend to have a larger history of medical issues, hence granting a diverse set of responses from various parts of the body if more adults and seniors are reached; however, the technology of finding one's natal chart should be thoroughly explained to older generations to establish whether age is a factor in the accuracy of astrological research studies. If these guidelines are addressed in prospective studies, the inquisitive nature of scientists' questions on astrology can be answered.

# Conclusion

My research inquiry aimed to identify potential relationships and/or correlations between astrology and medicine to explore astrology's label as pseudoscience. Based on the quantitative data collected from my methodology section amalgamated with my analysis of the data findings from the dissertation, it is evident that there is a correlation, to a given extent, between astrological zodiac sign placements and different types of medical complications. Even though some signs did not correlate to my initial hypothesis, the results reckon that the big three zodiac sign placements (sun, moon, and rising) provide a more accurate representation of one's history of medical complications and/or severe pain, therefore filling in a vital gap to the scientific discussion on astrology, rather than considering only one zodiac sign based on previous studies from the literature review.

I initially explored Astro-medicine due to astrology's negative stigma in the world of science, hoping to find relationships between astrology and medicine. The google form survey aided in answering my research question by depicting exact relationships in each stacked bar graph based on the variables of different types of medical complications and each zodiac sign in sun, moon, and rising placements. The research also raises the question concerning if an experiment were conducted, would the results support my hypothesis or disprove it. My goal was to add to the puzzle of changing scientists' perspective of astrology as a tool rather than a fantastical hindrance; inevitably, I was surprised when I found a multitude of correlations when all three zodiac sign placements were grouped into consideration.

Although my results challenge what scientists have stated on astrology's label as pseudoscience, debunking such knowledge on astrology supports future research inquiries because researchers are now cognizant that there is more to astrology than just your zodiac sign. The largest roadblock preventing astrology's facilitation to becoming a science is close-mindedness. If experts in fields of medicine, astrology, economics, etc...were to be more open-minded about astrology, we would be one step closer to understanding the language of the stars and make ideas and scientific breakthroughs dreamt as fiction, nonfiction.

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# Appendix I

# **Correlational Research Study Survey**

Hello, there participants, my name is Sebastian Pintea and I'm currently a senior at Santiago High School in Corona, CA. I'm enrolled in the AP Capstone Program where I focus on conducting, creating, and synthesizing research studies on topics of my choice. For this research study I'm conducting, I plan to explore the parameters of astrology in relation to fields of medicine. Astrologists state that each zodiac sign rules a part of the body so this study will see if that correlation proves to be true based on your sun, rising, and moon sign.

Participants under and over the age of 18 must fill out the informed consent(s) below. Along with that, if you're from Corona and have had past/present experiences of bodily pain and/or medical complications with cognizance of your birth time, birth location, and birth date, I would much appreciate your responses and participation in this study!

\* Required

Before taking the survey, please read through the Informed Consent Form using the link provided, and check the box to state your acknowledgment. You can access the 18 and over consent form in the first link and the under 18 consent form in the second link.

https://docs.google.com/document/d/1mRfVBiwyU7G25da4osssqUbgLXNRWM5 u7zqw\_jH1kmc/edit?usp=sharing

https://docs.google.com/document/d/13\_WjXsn8vNQ5qloixIvUByar4ILMujed2Lb1GISvHk/edit?usp=sharing \*

I have read through the Informed Consent Form and acknowledge that the anonymous information I share on this survey will be utilized as part of a student research paper.

I have read through the Informed Consent Form and allow my child to partake in the survey and acknowledge that the anonymous information I share on this survey will be utilized as part of a student research paper.

### Astrological Questions

Please visit the website <u>https://astro.cafeastrology.com/natal.php</u>. You will input your birth time, birth date, and birth location. From there you will click the "submit" button which is right below where you input your birth location. Once submitted, you will be prompted to a new page where you can scroll down until you see your natal chart. You MUST know all three pieces of information in order to help the accuracy of the data. Below are examples of birth charts where you can find your sun, rising/ascendant, and moon sign.

## Example: Sun sign is Cancer and Moon sign is Aquarius

Zodiac : Tropical							
$\odot$	Sun	0	Cancer	23°39			
0	Moon	~	Aquarius	29°19			
Å	Mercury	R	Leo	6°04'			
ç	Venus	0	Cancer	14°32'			
ð	Mars	ж	Pisces	9°05'			
4	Jupiter	Ω	Leo	21°03			
ħ	Saturn	0	Cancer	5°29'			

### Example: Rising/ascendant sign in Leo



60 N Node O Taurus



28°00'

What is your sun sign? \*

Your answer

What is your rising/ascendant sign? \*

Your answer

What is your moon sign? \*

Your answer

### Medical History

Please answer these questions honestly as these responses are anonymous.

Have you ever had any pain or medical complications in the following body parts? (feel free to select multiple responses) \*

ø	_	=	=	=		
L						
L						
L						
L						

Head, Brain, or Face

Throat, Neck, or Lips



- Stomach, Breasts, Chests, or Ribs
- Heart, Spine, or Forearms
- Intestines, Lower Spine, Fingers, or Spleen
- Kidneys, Skin, or Lumbar region
- Bladder, Anus, Nose, or Appendix
- Hips, Thighs, Nerves, or Arteries



- Legs, Ankles, or Blood Circulation
- Feet, Toes, or Lymphatic System
- No pain or medical complications
- Other:

# Correlational Research Study Survey

### Questions, Comments, or Concerns

Do not hesitate to reach out to me at my email <u>sebastianpsocal21@gmail.com</u> where I can answer any questions or statements! Thank you for partaking in my quantitative research study and I hope you learned a little more about yourself :)

Back

Submit