Our hypotheses are: Those who believe in astrology will rate the horoscopes as more accurate; People presented with their correct horoscope will view it as no more accurate than people presented with an incorrect horoscope. In order to test our hypothesis, the participants were randomly assigned to either the correct or incorrect horoscope group and given a horoscope and list of traits. The participants read both the traits and the horoscope, then they filled out the questionnaire, which asked about the accuracy of the information given to them. The participants, generally, took about ten minutes to complete the questionnaire. Before leaving, the participants were given a written debriefing, thanked for their participation, and were dismissed.

Astrological Accuracy

Astrology, a form of parapsychology, is defined as the study of the movements and relative positions of celestial bodies considered as having an influence on human affairs and the natural world. According to Merriam-Webster Dictionary a horoscope is advice and future predictions based on the date of a person’s birth and the positions of the sun and planets. According to Newport & Straberg (2001), a Gallup poll, more than 25% of the public believes in astrology, while 52% stated their disbelief in the topic. When asked about the scientific validity of astrology, only 6% of all adults in 2001 reported that it is “very scientific” versus the 50% of people who reported “not at all scientific” (National Science Foundation SRS, 2001).

The idea of astrology and horoscopes have become a huge part of many cultures worldwide and seems to influence actions, thoughts, and beliefs of millions of people. Why do people believe in horoscopes? According to various studies, someone who identifies themselves with astrology is more likely to accept a horoscope as accurate than nonbelievers. As stated in Glick, Gottsman, and Jolton (1988), overall, believers were more likely than skeptics to accept descriptions as accurate. Another fact from Glick, Gottsman, and Jolton (1988) stated that people given socially favorable horoscopes or descriptions, regardless of belief, will judge them to be more accurate. Even those who do not believe in astrology are more likely to change in light of a favorable description. Astrological traits aligned more with socially accepted ideas were accepted more than traits viewed in a negative light: “...one determinant of acceptance of astrology is the favorableness, or social desirability, of the particular character analysis it offers” (Hamilton, 2001). “...Skeptics who received favorable horoscopes became significantly more positive in their opinions toward astrology” (Glick, Gottsman, & Jolton, 1988). The findings of both Glick, Gottsman, and Jolton (1988) and Hamilton (2001), we found that the more that people believed in astrology generally, the more they believed that a particular horoscope was accurate.

Some limitations are present in our research. We sent out links to close friends, classmates and people we know. This sparked a major concern of having a small sample that was unrepresentative of the population. It was a majority female sample. The only (little to none) male representation in our sample was not enough to be able to conclude that men believed in astrology as much as women do. We had mainly sophomores and juniors take the questionnaire but they were mostly our friends or people we knew so that could not represent the sophomore and junior population as a whole. Another limitation could be how we made our inaccurate horoscopes. The inaccurate horoscopes were composed of two different horoscopes that were found online. This could have posed a problem because horoscope-savvy readers may have considered them artificial in some way. That may be the reason why people found them slightly less accurate.

If the study was to be redone, it could’ve included more of a lab study involving confederates to test if peer pressure plays a significant role in belief. People generally believe in horoscopes because they want to have a sense of knowing what’s going to happen in the future, a sense of being able to have a predictable life, also being able to have something to believe in that lets them know that tomorrow is promised. This is one of our original ideas that wasn’t able to be taken into account in such a short study. Taking a closer look into the importance of culture in belief, a bigger focus on the accuracy of Chinese astrology versus American astrology would have been able to figure out whether one people would be more inclined to believe. That would’ve been a great way to see if astrology, which is typically deemed as “original,” would have more accuracy ratings, a study to see if we would project a future horoscope on the following day. This would be a great idea to see whether or not reading a horoscope projected for the next day will cause the person to act upon what that horoscope says. In conclusion, our study found that people given socially favorable horoscopes or descriptions, regardless of belief, will judge them to be more accurate. The Barnum effect was supported because people who received correct horoscopes did not rate them as significantly more accurate than people who received inaccurate horoscopes. Like Glick, Gottsman, and Jolton (1988) and Hamilton (2001), we found that the more that people believed in astrology generally, the more they believed that a particular horoscope was accurate.

Materials

To conduct our experiment, we used a questionnaire. The questionnaire used is produced of questions we made up ourselves. The questionnaire is designed to measure the knowledge the participants have on their astrological sign and the traits associated to the sign. The questionnaire consists of 15 questions. The questions were of 2 sets: measuring belief in astrology generally and measuring accuracy of this particular horoscope and trait list. Some questions were: “I feel like astrology applies to me,” “I feel like the personality traits are accurate” and “I feel like the horoscope is accurate.” The participants read the traits and the horoscope and then were given a questionnaire about how accurate they felt the information was. Sample horoscope: “When opportunity knocks on your door, don’t always have to open it. Be careful not to become a person who always says ‘yes’ because you think being busy is a good way to be. It’s time to get a little more particular about what you get involved with...” Sample list of traits: “Intelligent, Innovative, Honest, Spontaneous, Impulsive.”

Procedure

Participants were told that the study was designed to see whether or not people believed the traits associated with their zodiac sign and whether or not they also believed the horoscope associated with their zodiac sign. The interested participants went to the link provided and were assigned randomly to either the correct or incorrect group after pressing “complete.” Upon entering the site, they read and agreed to the informed consent form. After a short demographics section, each participant was asked a few questions about how they felt about astrology. They were then asked what their zodiac sign was and given a horoscope and list of traits. The participants completed the questionnaire. The participants generally took about 10 minutes or less to complete the questionnaire. After submitting the questionnaire, the participants were thanked for their participation and given a debriefing form.

References


Figure 1. Shows the means of the accuracy of the true and false horoscopes

Figure 2. Shows the correlation of the belief of astrology versus the belief of horoscope $r(17) = -0.610, p$-value is 0.550; this was a 2-tailed test. This tests the Barnum effect: do people tend to think that any horoscope is accurate, perhaps in part because it is so vague?