# Astrology Marketing: Examining Diverse Factors Affecting Astrology Related Consumption

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#### Abstract

This thesis explores the factors influencing expenditure on astrology-related products and services by examining the psychological, social, and demographic determinants of consumer behavior in this domain. The literature review defines astrology, traces its historical roots, and assesses its current popularity. The methodology outlines robust data collection, sampling strategies, and ethical considerations. The analysis reveals a positive correlation between individuals' extraversion and openness to new experiences and their financial commitment to astrology-related goods and services. Additionally, the study establishes a significant connection between participants' monthly income levels and their spending patterns. Individuals surrounded by peers allocating funds to astrology-related products demonstrate a tendency to do the same. The discussion section contextualizes findings within existing literature, emphasizing both commonalities and divergences in consumer behavior. Practical implications for marketers, astrologers, and researchers are highlighted, providing insights into this distinct market segment. The study concludes by recognizing limitations and suggesting directions for future research. In essence, this thesis contributes significantly to understanding consumer behavior in the astrology domain by dissecting factors influencing expenditure on related products and services, emphasizing the role of psychological attributes, income levels, and social networks in shaping financial decisions.

**Keywords:** Astrology; consumer behaviour; market research; new age products; target market analysis.

## INTRODUCTION

Humanity has long existed as agricultural communities, shaped by their unique belief systems that defend against the unpredictable forces of the natural and social world. Within these belief systems, astrology holds a significant place, as it encompasses the observation of celestial phenomena such as the movements of the moon and the solar year. Furthermore, astrology comprises the interpretation of various life cycles, including those of animals and plants, which are seen as interconnected with celestial influences. These observations, ranging from equinoxes to important agricultural events like planting and harvesting, have been carefully monitored and accompanied by various community rituals. These rituals gradually gave rise to astrological knowledge and the development of calculation methods.

In the pre-industrial era, when agrarian societies dominated, people intimately connected their daily lives and activities with the celestial realm. The rhythms of nature dictated their existence, and the heavenly bodies were regarded as cosmic guides, providing insight into the optimal times for various activities. Astrology, as an integral part of their belief systems, played a pivotal role in understanding and navigating the cyclical patterns of life. It offered a framework through which individuals could interpret celestial events and their impact on human affairs.

Astrological practices within agricultural societies served practical purposes beyond their symbolic significance. Precisely tracking celestial events facilitated the synchronization of critical agricultural activities, enabling communities to align planting, harvesting, and other vital tasks with the optimal positions of heavenly bodies. Moreover, astrology was intrinsically linked to cultural and social rituals, as communities sought to maintain a harmonious relationship with the natural world.

Understanding the significance of this study requires addressing the often negative perception surrounding the field of astrology, as noted by Barton (1994). Academics entering this domain tend to focus on safer areas, such as exploring the history of mathematics and astronomy as revealed in astrological texts or studying manuscript traditions to avoid being perceived as straying beyond the boundaries of acceptable

scholarship. The realm of astrology is not easily accessible to researchers, as it requires technical expertise and presents numerous challenges concerning the reliability and interpretation of sources.

Despite these challenges, the significance of this study lies in investigating the factors that drive individuals to invest in astrological products and services in contemporary society. In today's world, where advancements in science and technology are abundant, astrology continues to attract a significant following, with people willingly spending money on various astrological offerings. Understanding the motivations behind this financial spending provides valuable insights into astrology's enduring appeal and its perceived value for individuals.

By delving into why individuals spend on astrology, we gain a deeper understanding of its role in their lives. This study aims to uncover the factors contributing to this financial commitment, identifying astrology's underlying needs, desires, and aspirations.

Studying the factors driving spending on astrological products and services provides valuable insights into the interplay between personal beliefs, societal trends, and consumer behavior. This research contributes to a comprehensive understanding of astrology's socioeconomic landscape and offers practical implications for businesses and practitioners operating within the industry.

In summary, this study fills a scholarly gap by exploring the factors influencing individuals' expenditure on astrology. By unraveling the underlying motives and understanding the interplay between beliefs, societal influences, and consumption patterns, this research provides valuable insights for marketers and practitioners in the astrology industry. The challenges and complexities of studying astrology, as highlighted by Barton (1994), underscore the need for thorough and rigorous investigations in this field.

# **Related Literature**

In an age, when we are witnessing urban space being modified and transformed more Previous discussions by scholars such as Lewis and Melton (1992) provide some indications of a potential association between socioeconomic status and New Age phenomena. Individuals with higher levels of education, potentially belonging to the "knowledge class" or cultural producers, may find the pursuit of alternative and unconventional forms of spirituality attractive and fashionable. New Age beliefs and materials might resonate more strongly with this population segment. Additionally, those more affluent, with more resources and leisure time, may have a higher propensity for engaging in religious or spiritual exploration, including consuming New Age materials (Lewis, 1992).

Numerous studies have investigated the relationship between gender and New Age beliefs and practices, contributing valuable insights into various aspects of this association. Existing research consistently highlights that women tend to exhibit higher levels of religiosity across different metrics. Consequently, it is reasonable to hypothesize that women may demonstrate a greater affinity for New Age concepts and engage more actively in related practices (Bednarkowski, 1992).

The profound influence of the baby boom generation on the development and growth of the New Age movement has been widely acknowledged. Scholars such as Brown (1992), Wuthnow (1976), and Melton (1986) argue that the experiences of the baby boomers during the social movements of the 1960s exposed them to Eastern religions and alternative spiritual practices, leading them to play a pivotal role in the emergence of New Age religion. However, it is essential to consider the temporal context of these earlier studies, as they were conducted when the baby boomer generation was much younger. As time has passed, the baby boomers have aged, and their interests, beliefs, and consumption patterns may have evolved.

The age effect posits that New Age consumption might be highest among younger adults, particularly those in their late teens and 20s, who are more inclined to embrace unconventional ideas about politics, spirituality, and social issues. This younger cohort may exhibit a heightened curiosity and openness to exploring the diverse and eclectic offerings of the New Age movement.

Marital status has historically had significant effects in mainstream religious cultures, with marriage being socially accepted and often viewed as a traditional norm (Calhoun, Light, & Keller, 1997). Therefore, those who reject the institution of marriage may display maladaptive tendencies in various aspects of their lives, including their religious or spiritual beliefs. People who have never been married may be more likely to adopt unorthodox or alternative forms of religion or spirituality, like astrology.

Multiple theoretical and empirical analyses have underscored the importance of interpersonal relationships in shaping the recruitment of individuals into mainstream religions, cults, and sects (Stark and Bainbridge, 1980; Sherkat and Wilson, 1995). These studies suggest that religious collectivities offer selective incentives, such as social activities and contacts, that extend beyond purely religious or spiritual benefits, thereby rewarding participation. Conversely, it should be noted that certain spiritual activities, such as "audience cults" (Stark and Bainbridge, 1996), may not be influenced by network ties. For example, Bainbridge and Stark's (1981) research among college students revealed a limited association between the composition of friendship circles and interest in the occult.

Mears and Ellison (2000) conducted a study to investigate the socio-demographic, religious network, and contextual correlates of New Age consumption. Their findings shed light on the factors influencing the purchase of New Age materials. The most significant factor identified in their research was the presence of social ties with other individuals who engage in New Age consumption. The study revealed that individuals who have connections with others who purchase New Age materials are more likely to engage in such consumption themselves.

Interestingly, the research challenged prevailing assumptions regarding the social bases of New Age beliefs and practices. Contrary to expectations, the study found that New Age consumption is not significantly influenced by demographic factors such as gender, income, education levels, or membership in the "baby boom" generation. Moreover, the authors noted that the prevalence of New Age consumption was consistent across various religious affiliations and did not vary significantly based on individual or community-level religious factors. This suggests that New Age materials appeal equally to individuals from diverse backgrounds, regardless of their religious or socio-economic characteristics.

According to Adorno (1994), astrology's resemblance to the opaqueness of the empirical world and its connection with disoriented agnosticism makes it appealing to supposedly skeptical and disillusioned individuals. The replacement of the cult of God with the cult of facts and the hypostatization of science as an ultimate truth contribute to the transfiguration of astrology into quasi-metaphysical powers. Based on Adorno's viewpoint, it can be suggested that astrology's uncertain and ambiguous nature might attract those who have experienced disillusionment, leading to a potential inclination to spend money on astrological products and services.

Adorno (1994) stated the interplay between organized religion, religious beliefs, and astrological beliefs. He posits that astrology's allure lies in its formalization of the notion of a higher authority governing life events without the explicit constraints associated with formal religious adherence, such as regular church attendance. This aspect renders astrological belief compatible with capitalist individualism, sharing authoritarian personality traits with religious belief. Consequently, one might expect a correlation between beliefs about astrology and beliefs about God or spirits.

In examining the factors influencing individuals' acceptance and incorporation of astrology-based personality descriptions into their self-image, several noteworthy observations emerge from the discussion. The favorableness of the proposed personality description plays a pivotal role in this process, as evidenced by previous studies (Collins, Dmitruk & Ranney, 1977; Glick et al., 1989). Contrary to the claim that astrological character sketches are universally flattering, a closer examination of popular astrology books suggests a more varied landscape, with Western astrology traditionally favoring certain zodiac signs over others (Carter, 1978; Hopper, 1938).

The results of this study indicate that individuals with moderate levels of belief in and knowledge about astrology tend to view contemporary personality descriptions of odd-numbered astrological Sun signs as more favorable. This aligns with the traditional division in Western astrology, where odd-numbered signs, perceived as masculine and fortunate, have historically been associated with more positive attributes (Hopper, 1938). Interestingly, individuals born under odd-numbered signs also express higher belief in

astrology compared to their even-numbered counterparts. This suggests that individuals who find astrology's self-portraits appealing are more likely to believe in its validity.

Furthermore, these findings shed light on the lasting impact of the favorableness of astrological descriptions. Unlike previous studies that assessed belief change immediately following personality analysis, this research suggests that the effect of favorableness can endure over time. Participants in this study had likely encountered their Sun sign descriptions well before participating, implying that these effects may have long-lasting implications.

These insights also provide a potential explanation for perplexing experimental outcomes. For instance, Van Rooij (1994) replicated Mayo et al.'s (1978) findings that individuals with positive Sun signs tend to attribute more extraverted characteristics to themselves, particularly when informed that a study is astrological. However, this effect was most pronounced in individuals with positive Sun signs. The current research suggests that this difference in responsiveness may be attributed to varying levels of belief in astrology between positive and negative Sun sign natives.

Chang et al. (2015) identified agreeableness as the most influential trait among the Big Five in predicting existential spirituality, exemplified by perspectives such as viewing life as a journey towards fulfillment. Similarly, Furnham and Buchanan (2005) observed that individuals who self-rated higher in "spiritual intelligence," reflecting a belief in their ability to exert spiritual influence on others, tended to exhibit higher levels of agreeableness. Moreover, belief in astrology has been associated with religious convictions (Allum, 2011; Bauer & Durant, 1997). This suggests that individuals with high levels of agreeableness, particularly those with religious inclinations, might find compatibility between their worldview and beliefs in astrology.

Andersson et al. (2022) explored factors influencing belief in astrology, revealing that individuals endorsing astrology tend to exhibit higher levels of agreeableness. The study noted a positive association between agreeableness and belief in astrology, aligning with prior research linking agreeableness to spiritual and religious inclinations. The study concluded that individuals may gravitate toward astrology for diverse reasons, leading to

various subtypes of astrology believers. This nuanced understanding could be a promising avenue for future research (Andersson et al., 2022).

# **Hypotheses**

- Higher education levels correlate with increased spending on astrology-related products and services, as the "knowledge class" may find alternative spirituality more appealing (H1).
- Individuals with higher incomes allocate more money to astrology-related products and services, as greater resources facilitate spiritual exploration (H2).
- Women are more likely than men to spend on astrology due to their affinity for New Age beliefs and practices (H3).
- Younger adults (late teens-20s) allocate a higher portion of income to astrology due to curiosity and openness to New Age offerings (H4).
- Married individuals spend less on astrology products than unmarried or in non-traditional partnerships. (H5)
- People with social ties engaged in astrology are more likely to spend, indicating the influence of interpersonal networks (H6).
- Those experiencing recent significant disappointments allocate more expenditures to astrology-related products and services (H7).
- Strong astrological belief is associated with greater religiosity, leading to increased spending on astrological products and services (H8).
- People with positive or odd-numbered zodiac signs are more inclined to believe in astrology (H9).
- Individuals displaying greater agreeableness may be more prone to astrological beliefs, impacting their consumer choices, potentially leading to increased spending on astrological products and services (H10).

## RESULTS

The subsequent section encapsulates insights gleaned from an expert interview with Dinçer Güner, a distinguished astrologer renowned for his contributions to the field. Drawing upon his extensive experience and profound understanding of astrology, this segment delves into key aspects of consumer behavior within the astrology industry. Güner's perspectives shed light on motivations, evolving trends, and demographic dynamics, providing a nuanced exploration of the intricate relationship between individuals and astrological practices. The ensuing synthesis encapsulates the expert's discerning observations, offering valuable contributions to the scholarly discourse on astrology and its adherents.

According to Güner, the motivation for engaging with astrology extends beyond entertainment, evolving into a tool for self-discovery. Astrology inquiries, once confined to personal matters, now encompass broader socio-political concerns, reflecting a transformative societal landscape. Gender dynamics within astrology interest are in flux, with a projected move towards gender parity. Astrological appeal spans diverse age groups, emphasizing the astrologer's role in connecting with specific generational experiences.

Higher educational pursuits correlate with active participation in astrological counseling, underscoring the multidimensional appeal across educational strata. Astrology, perceived as a luxury service, attracts individuals from middle-class backgrounds, unveiling nuanced relationships between astrology, income levels, and societal interests. A nuanced examination challenges simplistic associations between astrology, new age movements, and marital status, emphasizing multifaceted motivations for engagement.

Dismissing reductionist views, Güner underscores the intricate nature of astrology, cautioning against exclusive focus on positive sun signs. Insights into the religious orientation of astrology followers remain elusive, with Güner emphasizing diverse incorporations into belief systems. Contrary to claims, astrology enthusiasts do not uniformly display obedience towards authority; rather, their engagement reflects a pursuit of control and self-discovery. Güner's discerning observations contribute significantly to the academic understanding of consumer behavior in the astrology industry.

The following section unveils the outcomes of a meticulous qualitative investigation, delving into the intricate dimensions of consumer behavior within the astrology industry. Building upon the literature and the expert insights provided by Dinçer Güner, this phase extends the examination to include findings derived from in-depth qualitative research. These qualitative findings serve to enrich the scholarly discourse, offering a comprehensive understanding of the multifaceted nature of consumer engagement with astrology.

Despite initial expectations, age did not emerge as a significant determinant of spending patterns, underscoring the need for a nuanced perspective. The gender imbalance in our sample limits conclusive insights into gender-specific spending behavior, urging future research for a more balanced representation.

Contrary to the hypothesis linking higher education to increased spending, our analysis found no significant differences among educational status groups. However, income levels played a pivotal role, supporting the notion that higher incomes correlate with greater expenditures on astrology-related products. Marital status, beliefs in astrology, and recent disappointments did not show notable associations with spending behavior.

Social connections emerged as a powerful influence, with participants perceiving their close circle's high engagement in astrology spending more on related products. No apparent link was found between zodiac signs and spending behaviors. However, personality traits, particularly higher levels of extraversion and openness to experience, were identified as predictors of increased expenditures in the astrology related products and services.

Notably, the unexpected correlation between openness to experience and spending suggests a broader influence on consumer decisions. This study contributes valuable insights to the understanding of consumer behavior within the astrology industry, emphasizing the multifaceted dynamics that shape individuals' financial commitments to astrological products and services.

### DISCUSSION

This section interprets study findings and discusses implications. Key results reveal a positive correlation between extraversion, openness to experience, and astrology spending. Higher monthly income is associated with increased spending, while social networks significantly influence individual spending tendencies. Limitations include sample representation bias, social desirability, reliance on self-reported data, cross-sectional design constraints, and cultural context specificity.

The study contributes to understanding the relationship between income levels and astrology spending, aligning with scholars like Lewis (1992). It highlights the need for a theoretical framework explicitly exploring the intricate interplay between socioeconomic status and astrology consumer behavior.

Expanding on Mears and Ellison's (2000) groundwork, findings echo their emphasis on social ties' substantial role in astrology-related consumption. This study enhances existing literature by revealing the impact of interpersonal relationships on spending decisions in the astrology domain.

The research validates the hypothesis that agreeableness positively influences belief in astrology. Surprisingly, openness to experience emerges as another predictor of spending behavior, expanding the understanding of how personality traits influence consumer choices. Marketers can refine strategies by understanding the link between personality traits and spending.

Limitations include sample representation bias, social desirability, self-reported data reliance, cross-sectional design constraints, and cultural context specificity. Future research should explore these aspects in more diverse settings and extend the study longitudinally.

Future research directions include longitudinal studies, comparative analysis with other belief systems, exploration of cultural factors, market analysis, investigation of online platforms' influence, and cross-cultural studies. These avenues can deepen our understanding of astrology-related consumer behavior and inform targeted marketing strategies.

# **CONCLUSION**

This study delves into factors influencing astrology-related spending, offering insights into consumer behavior in the industry. Results highlight the impact of personality traits, income levels, and social networks on financial decisions.

The analysis unveils a positive link between extraversion, openness to experience, and astrology spending. Monthly income correlates with higher spending, emphasizing the financial commitment of individuals with greater resources. Social networks play a crucial role, as individuals with spend-friendly peers exhibit similar tendencies in astrology-related consumption.

Marketers can tailor strategies based on personality traits and income levels revealed in this study, enhancing their outreach to target audiences. From a research standpoint, the study contributes valuable insights into the psychological, social, and demographic drivers of astrology-related consumer behavior.

While impactful, the study has limitations, including a specific geographic focus and a limited sample size. Acknowledging these constraints, future research should aim for larger, diverse studies to validate and expand on these findings.

In summary, this study advances our understanding of consumer behavior in astrology, offering practical implications for marketers and researchers navigating the intricacies of the industry.

## REFERENCES AND NOTES

Adorno, T. W. (1994). Stars Down to Earth and Other Essays on the Irrational in Culture. Routledge.

Akpınar, Ş. (2002). Lâmii'nin Vâmık u Azrâ Mesnevîsinde Astrolojik Unsurlar. *Türkiyat Araştırmaları Dergisi*, *12*, 169-202.

Albanese, C. L. (1990). *Nature religion in America: From the Algonkian Indians to the New Age*. Chicago, IL: University of Chicago Press.

Allum, N. (2011). What Makes Some People Think Astrology Is Scientific? *Science Communication*, 33(3), 341–366. https://doi.org/10.1177/1075547010389819

Altoparlak, B. (2004). Kehanetin A-B-C'si. İstanbul: Omega Yayınları.

Andersson, I., Persson, J., & Kajonius, P. (2022). Even the stars think that I am superior: Personality, intelligence and belief in astrology. *Personality and Individual Differences*, 187, 111389. https://doi.org/10.1016/j.paid.2021.111389

Arroyo, S. (2000). Astroloji, psikoloji ve dört element. İstanbul: İlhan Yayınevi.

Bainbridge, W. S., & Stark, R. (1981). Friendship, religion and the occult: A network study. *Review of Religious Research*, 22, 313-327.

Barton, T. (1994). Ancient Astrology. Routledge.

Bauer, M., & Durant, J. (1997). Belief in Astrology: A social-psychological analysis. *Culture and Cosmos*, 1(01), 55–71. https://doi.org/10.46472/CC.0101.0211

Bednarkowski, M. F. (1992). The New Age movement and feminist spirituality: Overlapping conversations at the end of the century. In J. R. Lewis & J. G. Melton (Eds.), Perspectives on the New Age (pp. 167-178). Albany: State University of New York Press.Brown, S. L. (1992). Baby boomers, American character, and the New Age: A

synthesis. In J. R. Lewis & J. G. Melton (Eds.), Perspectives on the New Age (pp. 87-96).

Albany: State University of New York Press.

Burger, J. M. (2006). *Kişilik*. (Trans. İnan Deniz, E. Sarıoğlu). (1st ed.). Istanbul: Kaktüs Yayınları.

Burton, D.- Grandy D. (2004) Büyü, Gizem Ve Bilim. İstanbul: Varlık Yayınları.

Calhoun, C., Light, D., & Keller, S. (1997). Sociology (7th ed.). New York, NY: McGraw-Hill.

Carter, C. E. O. (1978). Essays on the foundations of astrology. London: Fletcher and Son. Chamorro-Premuzic, T. (2007). Personality and individual differences. Wiley Blackwell. Chang, E. C., Jilani, Z., Yu, T., Fowler, E. E., Lin, J., Webb, J. R., & Hirsch, J. K. (2015). Fundamental dimensions of personality underlying spirituality: Further evidence for the construct validity of the RiTE measure of spirituality. Personality and Individual Differences, 75, 175–178. https://doi.org/10.1016/j.paid.2014.11.027

Collins, R. W., Dmitruk, V. M., & Ranney, J. T. (1977). Personal validation: Some empirical and ethical considerations. *Journal of Consulting and Clinical Psychology*, 45(1977), 70-77.

Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment*, 64(1), 21-50.

Çivitci, N., & Arıcıoğlu, A. (2012). Beş Faktör Kuramına Dayalı Kişilik Özellikleri. Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi, 12(23), 78–96.

Erkılıç, G. A. (2018). *Astroloji Sözlüğü*. İstanbul: Havvas Yayınları.

French, C. C., Fowler, M., Peers, D., & McCarthy, K. (1991). The Barnum effect. *The Skeptical Inquirer*, 15(2), 166.

Furnham, A., & Buchanan, T. (2005). Personality, gender and self-perceived intelligence.

Personality and Individual Differences, 39(3), 543–555. https://doi.org/10.1016/j.paid.2005.02.011

Gauquelin, M. (1991). Neo-Astrology - A Copernican Revolution. Penguin.

Glass, R., Prichard, J., Lafortune, A., & Schwab, N. (2013). The influence of personality and Facebook use on student academic performance. *Issues in Information Systems*, 14(2), 119-126.

Glick, P., Gottesman, D., & Jolton, J. (1989). The fault is not in the stars: Susceptibility of skeptics and believers in astrology to the Barnum effect. *Personality and Social Psychology Bulletin*, 15(1989), 572-583.

Goldberg, S. (1979). Is astrology a science? The Humanist, 39(2), 9-16.

Google LLC. (n.d.). Google Trends data: Astrology. Retrieved April 25, 2023, from <a href="https://trends.google.com">https://trends.google.com</a>

Hamilton, M. M. (1995). Incorporation of astrology-based personality information into long-term self-concept. *Journal of Social Behavior and Personality*, 10(1995), 707-718.

Hornblower, S., & Spawforth, A. (n.d.). Astrology. *Oxford Classical Dictionary*. Retrieved from

https://www.oxfordlearnersdictionaries.com/definition/english/astrology?q=astrology

Hopper, V. F. (1938). Medieval number symbolism. New York: Cooper Square.

Horzum, M. B., Ayas, T., & Padir, M. A. (2017). Beş Faktör Kişilik Ölçeğinin Türk Kültürüne Uyarlanması. *Sakarya University Journal of Education*, 398-408. <a href="https://doi.org/10.19126/suje.298430">https://doi.org/10.19126/suje.298430</a>

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big-five trait taxonomy: History, measurement and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of Personality: Theory and Research (pp. 114-158)*. New York, NY: Guilford Press.

Kulak, Ö. (2017). *Theodor Adorno-Kültür Endüstrisinin Kıskacında Kültür*. İstanbul: İthaki Yayınları.

Lewis, J. R. (1992). Approaches to the study of the New Age movements. In J. E. Lewis & J. G. Melton (Eds.), *Perspectives on the New Age (pp. 1-12)*. Albany: State University of New York Press.

Lounsbury, J. W., & Gibson, L. W. (2009). Personal style inventory: A personality measurement system for work and school settings. Knoxville, TN: Resource Associates Inc.

Marshall P. (2005) Dünya Astrolojisi. İstanbul: Dharma Yayınları.

Mayo, J., White, O., & Eysenck, H. J. (1978). An empirical study of the relation between astrological factors and personality. *Journal of Social Psychology*, 105(1978), 229-236.

McCrae, R. R., & Costa, P. T., Jr. (2003). *Personality in adulthood: A Five-Factor Theory Perspective (Second edition)*. New York: Guilford Press.

Melton, J. G. 1986. Encyclopedic handbook of cults in America. New York: Garland.

Melton, J. G., 1992. *New Thought and the New Age. In Perspectives on the New Age*, edited by J.R. Lewis and J.G Melton, 15-29. Albany: State University of New York Press.

Mears, D. P., & Ellison, C. G. (2000). Who buys new age materials? Exploring sociodemographic, religious network, and contextual correlates of new age consumption. *Sociology of Religion, 61,* 289-313.

Mitchell, V-W. (1995). Using astrology in market segmentation. *Management Decision*, 33(1), 48-57.

Ornstein, E.R., (2001). Yeni Bir Psikoloji. İstanbul: İnsan Yayınları.

Pedersen, O. (1993). Early Physics and Astronomy: A Historical Introduction. Cambridge University Press

Samriddhi, C., & Roshan, D. (2023). *Astrology Market* (CG: Consumer and general services) (Report Code: A31779). Retrieved from <a href="https://www.alliedmarketresearch.com/astrology-market-A31779">https://www.alliedmarketresearch.com/astrology-market-A31779</a>

Shaughnessy, M. F., Neely, R., Manz, A., & Nystul, M. (1990). Effects of birth order, sex, and astrological sign on personality. *Psychological Reports*, 66(1990), 272-274.

Sherkat, D. E., & Wilson, J. (1995). Preferences, constraints, and choices in religious markets: An examination of religious switching and apostasy. *Social Forces*, *73*, 993-1026. Sundberg, N. D. (1955). The acceptance of "fake" versus "bona fide" personality test interpretations. *Journal of Abnormal and Social Psychology*, *50*, 145-147.

Stark, R., & Bainbridge, W. S. (1980). Networks of faith: Interpersonal bonds and recruitment into cults and sects. *American Journal of Sociology*, 86, 1376-1396.

Stark, R., & Bainbridge, W. S. (1996). *A theory of religion*. New Brunswick, NJ: Rutgers University Press.

Thornton, T. A. (2016). *Ideas of order: The meaning and appeal of contemporary astrological belief* (Doctoral dissertation). University of Oregon.

Wuthnow, R. (1976). Recent patterns of secularization: A problem of generations. American Sociological Review, 41, 850-867.

Van Rooij, J. (1994). Introversion-extraversion: Astrology versus psychology. *Personality and Individual Differences*, 16(1994), 985-988.

